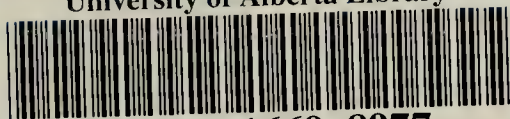


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# THE *Blue Jay*

Vol. XXII, No. 3

SASKATOON, SASK.

September, 1964



**Downy Woodpecker Feeding Young** (see page 101)

Photo by Hans S. Dommasch

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REGINA, SASK.



# BLUE JAY CHATTER

One of the most interesting aspects of natural history in Saskatchewan this summer is the abundance of Lark Buntings in the prairie region. We have reports of this species from as far east as Broadview and as far north as Nipawin and Tisdale, and Manitoba's Natural History Society Newsletter, No. 2, 1964, reports "this species made a major incursion into southwestern Manitoba this spring." This seems to us to be a renewal of the pattern of some 30 years ago during the 'thirties' as reported by Margaret Belcher in *Birds of Regina*. Lark Buntings were noted as especially abundant in those years. Also, at that time the Lazuli Bunting nested in Regina; and now, 30 years later, a pair has been seen in a garden in the northwest part of the city. At least four other Lazuli Buntings (males) have been sighted in the Qu'Appelle Valley north of Regina, and we have reports of others elsewhere, e.g. in Moose Jaw, where Mrs. Taylor reports seeing her first Lazuli. In a similar way, the closely related Indigo Bunting, found as a resident in the Qu'Appelle Valley in 1934 by Manley Callin, has appeared again with at least three males being recorded, one with a female and nest north of Broadview (under observation by Charles Thacker). We urge members and readers who may have sighted either the Lazuli Bunting or Indigo Bunting to report their observations as soon as possible to Manley Callin at Fort San, Sask., since he is working up a special report on the status of these two species.

A most interesting additional species which seems to fit this pattern of recurrence of some 30 years past is the Dickcissel, also reported by Margaret Belcher as nesting in Regina in 1933-34. In an article reporting a record of the southwestern Brewer's Sparrow, Bob Nero suggested that we should look for this species to show up; just in time for this issue, Mrs. Keith Patch, of Oxbow, Sask., reports seeing a bird of this species. Baird's Sparrows, Grasshopper Sparrows, and other arid grassland species may similarly be in greater abundance and may be found farther north than usual. Perhaps some of our ornithologically-minded members would be interested in undertaking a province-wide survey of some of these species? We need some roadside transects, actual counts over a measured area, to provide a better record than is presently available of what is happening in our small corner of the world.

The summer of 1964 has been an exciting and busy time for your chief editor. There have been three main highlights. The first was the summer meeting in the Beechy area along the South Saskatchewan River where Doug Redley now at Discovery, 55 miles north of Yellowknife, N.W.T., and the people of the Beechy Community demonstrated their hospitality and their pride in their environment. The 'trail ride', a four-day trip by horse with the Chandlers into Prairie Dog country and along the Frenchman River was the second highlight. This trip gave me time to relax and really enjoy the grassy hillsides, the gumbo flats and the wide, wide skies. The enjoyment of watching the antics of the young Prairie Dogs was considerably marred by a Sunday party of "sportsmen" who shot at the animals from their slowly moving automobile. The third valuable experience this summer was really a series of trips east of Regina in search of plants, many of which are unexpected in this area; one such plant is described on page 117-118.

May I close by urging all members who possibly can to come to our annual meeting where they may learn more of our problems, take a more active part in solving them and help us to plan ways to gain members for the society. Our guest speaker, Saturday evening, October 17, 1964, in the Saskatchewan Museum of Natural History auditorium in Regina is Mr. R. York Edwards. Come and bring your friends for it will be a stirring message and it is an open public meeting.

George F. Ledingham.

# The Blue Jay

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PROF. WILLIAM A. S. SARJEANT

674 UNIVERSITY DRIVE

SASKATOON, SASKATCHEWAN, CANADA

Junior Membership,



# History of Weeds in Western Canada

by the late A. C. Budd

**EDITOR'S NOTE:** The following article, not previously printed, is almost exactly as it was given by Mr. Budd in addresses to the Weed Inspectors and Supervisors Course in Saskatoon in 1952 and 1953. Mr. Budd, who was Range Botanist, Canada Department of Agriculture, Experimental Farm, Swift Current, contributed regularly to the *Blue Jay* till his death. Dr. J. F. Alex, Ecologist, Weed Control Research Station, Canada Department of Agriculture, Experimental Farm, Regina provided the illustrations and kindly edited and combined the two talks given by Mr. Budd on this subject.

What is a weed? It is variously defined in dictionaries as "wild growth, a wild herb springing where it is not wanted, any plant growing in cultivated ground to the detriment of the crop or to the disfigurement of the place, and as an economically useless or unsightly plant." Emerson stated, "a weed is a plant whose virtues have not been discovered." My own definition is that weeds are nature's method of correcting man's mistakes.

Were weeds present in our Prairies before white man settled here and brought the land under cultivation? Yes, many of the plants we now call weeds were here long before the first white man arrived. These included: spearleaf goosefoot, *Monolepis nuttaliana* (R. and S.) Greene; red goosefoot, *Chenopodium rubrum* L.; oakleaf goosefoot, *C. salinum* Standl.; lamb's quarters, *C. album* L. s.l.; orache, *Atriplex* spp.; gray and green tansy mustards, *Descurainia richardsonii* (Sweet) O. E. Schulz and *D. pinnata* (Walt.) Britt. var. *brachycarpa* (Richards.) Fern.; branched peppergrass, *Lepidium ramosissimum* Nels.; spider flower, *Cleome serrulata* Pursh; the evening primroses, *Oenothera* spp.; wild tomato, *Solanum triflorum* Nutt.; false ragweed, *Iva xanthifolia* Nutt.; giant ragweed, *Ambrosia trifida* L.; perennial ragweed, *A. psilostachya* DC.; biennial wormwood, *Artemisia biennis* Willd.; pasture sage, *A. frigida* Willd.; broomweed, *Gutierrezia sarothrae* (Pursh) Britt. and Rusby; gumweed, *Grindelia squarrosa* (Pursh) Dunal; Canada fleabane, *Erigeron canadensis* L.; the sunflowers, *Helianthus* spp.; blue lettuce, *Lactuca pulchella* (Pursh) DC.; and the skeleton weeds, *Lygodesmia* spp.

Native grasses of the prairies were frequently subjected to overgrazing by roving buffalo herds. In such areas, the soil was exposed to rapid wind and water erosion. With reduced competition from grasses, broad-leaved plants (such as pasture sage, broomweed and sunflowers) grew taller, more robust and more numerous than before overgrazing occurred. Their increased growth modified ground winds, held the snow, and reduced excessive run-off of rain. In the protection they afforded, soil erosion was reduced and the grass became re-established. In other areas of soil disturbance such as gopher mounds, buffalo wallows and animal trails, annual plants—like wild tomato and tumbleweed—grew quickly. They were followed by perennials and eventually a return of the native grasses,

Most of these plants still perform the same role they did in past centuries; today we call them "weeds" because either we **want** to maintain the soil in a disturbed condition, or we have other uses for it.

With the advent of white man in the prairies new weeds appeared. Fort Chesterfield was established in 1822 near Empress, Alberta. A Hudson's Bay trading post was set up in 1871 near East End on the Saskatchewan side of the Cypress Hills. Bales of trading goods and food stuffs for both man and beast were brought in and with them the seeds of plants from distant regions. Knotweed (*Polygonum* spp.), stinkweed (*Thlaspi arvense* L.), dandelion (*Taraxacum officinale* L.), and the sowthistles (*Sonchus* spp.) invariably became plentiful around the early forts and posts. In 1873-1874 the Boundary Commission surveyed the International Boundary, and in 1874 Commissioner French brought the first detachment of the Mounted Police through these southern prairies. Both parties carried quantities of oats for feeding horses and oxen as well as their own baggage. No doubt many weeds were brought in by this manner from the central United States and from eastern Can-



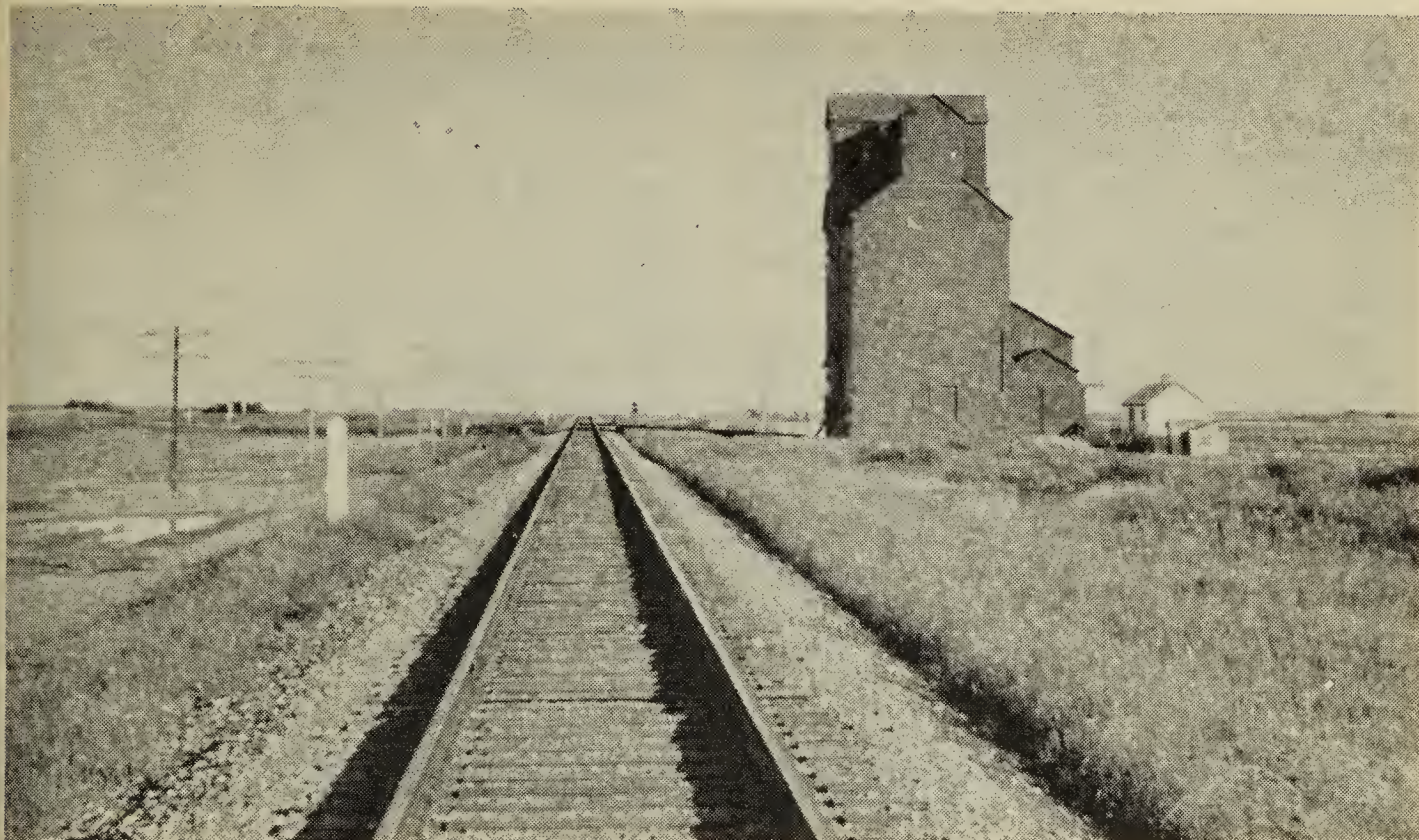


Photo by J. F. Alex.

The bare soil left by railway construction crews was rapidly colonized by annual native and introduced weeds which held back erosion until the grasses again took over. Some species seem virtually restricted to this habitat.

ada. Macoun found cow cockle (*Saponaria vaccaria* L.) in the Cypress Hills in 1880.

Later the railway construction contractors brought in quantities of horse feed for their outfits, and these left a legacy of weeds from the East and South along the right-of-way. The bare and excavated soil left by these construction crews along the track were rapidly colonized by spider flower, low mat spurges (*Euphorbia* spp.) and other native plants as well as by introduced weeds from the stock feed, and these held back erosion until the grasses again took over. This apparently was how redroot pigweed (*Amaranthus retroflexus* L.) was first introduced from the southern United States. It was present in Ontario in 1859, in British Columbia in 1886 and was plentiful in Manitoba by 1899. Tumbling mustard (*Sisymbrium altissimum* L.) was reported along the Canadian Pacific Railway in a number of places in 1885. Around that same time the earliest prairie records were made of wild buckwheat (*Polygonum convolvulus* L.), Russian pigweed (*Axyris amaranthoides* L.), purple cockle (*Agrostemma gigatho* L.), false flax (*Camelina* spp.), ball mustard (*Neslia paniculata* (L.) Desv.), European blue bur (*Lappula*

*echinata* Gilib.) and several other species of introduced weeds.

Other species have obviously spread along railway tracks, and until recently some of them seemed almost restricted to those habitats. Smooth catchfly (*Silene cserzei* Baumg.), was recorded in North Dakota in 1916, near Swift Current in 1940, and at Prince George, B.C., in 1944. It has become virtually a dominant of railway tracks around Swift Current. Heartleaf umbrella wort (*Mirabilis nyctaginea* (Michx.) MacM.), native of the Red River Valley area in Manitoba, was in 1946 found in full possession of the cinder railway bed near Swift Current. Also at Swift Current, perfoliate peppergrass (*Lepidium perfoliatum* L.) was found in 1936 on the railway, the second record for Canada, the first being in southern B.C. in 1931. Downy brome (*Bromus tectorum* L.), first recorded in Ontario in 1886 and in B.C. in 1889, is now plentiful in many places along the railways, especially in those places frequented by transients awaiting the "side-door pullmans". Because of barbed awns its 'seed' is easily carried on clothing, packs and bedding, and has often been left at camp-sites by folk travelling from the west.

Around the turn of the century the



southern part of the Western Canadian Prairies was predominantly ranching country. Prairie fires were a perpetual hazard so systems of long fireguards were ploughed. These were often covered with tumbleweed and tumbling mustard throughout their entire length.

The advent of the homesteader and the growing of grain on a large scale brought about a decided change in the prairie flora. Whereas prairie grass had previously been king, the new annual grasses—wheat, oats and barley—were substituted. The compact and somewhat weed-resistant sod was broken up and rendered very receptive to most forms of plant life. Imports of seed grain from the older countries brought in many and varied species of European and Asiatic weeds, and until the less hardy species were eliminated by severe climatic conditions a very large number of species could be found. In my first crop for instance, in 1911, the first weed I pulled was a purple cockle, a weed I have never since seen growing wild in Canada.

In 1910, when I homesteaded about 18 miles east of Swift Current, the few weeds growing in cropped land in the area could generally be pulled on a Sunday and were mostly lamb's quarters. By 1911 the commonest weed in my own crop was wormseed mustard (*Erysimum cheiranthoides* L.), but there were also numerous plants of false flax, ball mustard, cow cockle, purple cockle and wild buckwheat brought in with the Manitoban seed I used. Of these the only one to persist to any great extent was wild buckwheat which seemed better suited to our semi-arid conditions and was more difficult to remove from grain than were the others.

Large acreages were seeded to flax in 1912 and with that crop came numerous weeds, especially the mustards (*Brassica* spp.). The moist spring of 1913 was followed by increased prominence of lamb's quarters, tumbling mustard, skeleton weed and wild tomato, the latter two particularly in gardens. Wild buckwheat remained the most plentiful, however, as its seeds were already thoroughly distributed across the farm.

In the Swift Current area 1914 was a dry season and the scanty crops

were polluted with tumbling mustard. Because of the shortage of feed for livestock, the government shipped in feed oats and encouraged relief work on road-building. This feed was abominably dirty with wild oats (*Avena fatua* L.) and stinkweed, and was the major cause of severe infestations of both weeds in subsequent years. Russian thistle (*Salsola pestifer* A. Nels.) was first seen in our region that fall, being found in road cuts and borrow-pits (places from which soil was "borrowed" to make a high grade). This Eurasian plant had been reported from South Dakota in 1873, Manitoba in 1894 and southern Alberta a few years later. Although by 1914 it had become plentiful in southern Alberta and was rapidly spreading eastward, no warning had been published about it. Practically all the weed propaganda had been directed at perennial sow-thistle, a weed we had no need to fear in our dry area.

Steady, cool, drizzling rains during the 1915 growing season followed by a long, open fall gave us the best crops we had ever known. We farmers were too busy crowing over our bumper crops, spending our wheat money and paying our debts to bother about trifles like weeds! Nevertheless, they were present in abundance. In the exposed soil of borrow-pits and road cuts made the previous fall, there was a vast growth of weeds and native plants. Our drab scenery was much brightened by showy plants of spider flower, scarlet mallow (*Malvastrum coccineum* (Pursh) A. Gray), white and yellow evening primroses, scarlet gaura (*Gaura coccinea* Pursh), coneflower (*Ratibida* spp.), goldenrods (*Solidago* spp.), etc.

1916 was one of those wet and dry years: dry most of the season but with occasional extremely heavy, torrential rains. Lamb's quarters was very luxuriant. Grain and stinkweed grew apace. Canada thistle was abundant along roadsides. Nevertheless, it was during the dry periods of that year that we first experienced soil drifting. The expectations of another bumper crop were dashed when rust hit the grain and it only yielded five or six bushels of very low grade wheat to the acre.

Then followed the first real run of



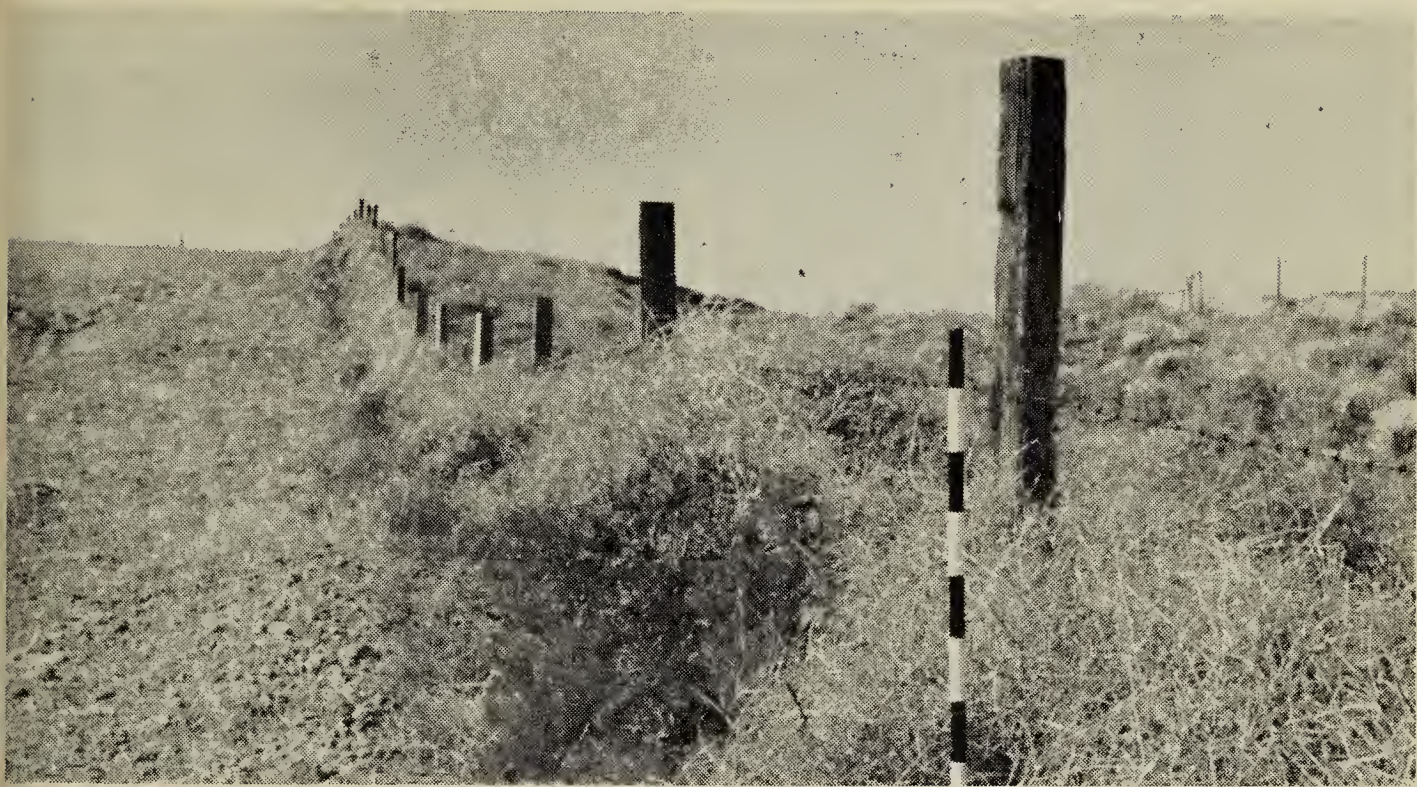


Photo by J. F. Alex.

Had it not been for Russian thistle the south-west might have become a blown-out desert during the dry years since 1914.

dry years—1917, 1918 and 1919—when conditions became progressively worse for the farmers. During these years Russian thistle increased immensely. Farmers had been recommended by the authorities to sow their grain at lighter rates. The lighter stand of grain meant many misses and gaps which the weeds occupied. Soil drifting was very bad and the high winds rolled Russian thistle everywhere. We cursed it, we damned it and we figured that still another evil had been loosed from Pandora's box to torment us; but really it was a sheep in wolf's clothing and perhaps was the best thing that happened to us. During these drought years it made a tolerable stock feed, not the best by any means, but the stock could get by on it. More important, though, it covered the bare ground with a mat of vegetation and reduced erosion to a minimum. Had it not been for Russian thistle the south-west might have become a blown-out desert. This was the basis of my definition of a weed as, "nature's method of correcting man's mistakes." Since then Russian thistle has been our dominant weed and has kept most other weeds in check. Attempts have been made to get rid of it but, getting rid of it if successful, might mean that another and maybe worse weed would take its place.

In a short ten years our countryside had changed from clean, virgin prairie to blocks of cultivated land within a network of roads and railways, all badly infested with weeds.

Many other weeds have become prominent since the early homestead days. Prickly lettuce (*Lactuca scariola* L.) is now abundant around slough margins and in waste places in towns and villages. Flixweed (*Descurainia sophia* (L.) Webb), a close relative of the tansy mustards, was introduced from Europe and is now common throughout the prairies, even growing in native grassland wherever a tiny patch of disturbed sod is encountered. Yellow goatsbeard (*Tragopogon dubius* Scop.), originally introduced from Europe to Colorado as an ornamental garden plant, slowly migrated northward and eastward across the prairies and was first encountered here about 1928. Kochia (*Kochia scoparia* (L.) Roth) and garden atriplex (*Atriplex hortensis* L.) are garden plants that have escaped from cultivation and become common in and around towns throughout the prairies. Hedge bindweed or wild morning glory (*Convolvulus sepium* L.), a native perennial vine which was occasionally found on bushes along water courses, has spread in cultivated land and become an important weed in many regions of moist soil. Poverty weed





Photo by J. F. Alex

Yellow Goatsbeard reached Western Canada from Europe via Colorado about 1928. In this 100-acre abandoned field in southern Alberta it is virtually the sole occupant.

(*Iva axillaris* Pursh) and several smartweeds (*Polygonum* spp.) have similarly become troublesome in cultivated fields. These native plants were not aggressive under pristine conditions but they are better adapted to certain soil conditions after cultivation than are the economic plants farmers try to grow.

With settlement, came the planting of introduced trees, small fruits, vegetables, flowers and lawn grasses around homes, as well as new forage plants for improved hay and pasture. These introductions proved to be prolific sources of new weeds, as contaminants either in the seed or occasionally in the packing around roots of nursery plants. Hoary cress (*Cardaria* spp.), leafy spurge (*Euphorbia esula* L.), field bindweed (*Convolvulus arvensis* L.), Russian knapweed (*Centaurea repens* L.), purslane (*Portulaca oleracea* L.) and common chickweed (*Stellaria media* (L.) Cyrill) are examples of weeds introduced in this manner.

Many of our weed problems (not all, but many) are the result of improper farming methods: land used for the wrong purpose or land improperly worked. Moist soils usually require more tillage than drier ones, yet low areas and slough margins in a field often receive less treatment and consequently grow weeds. Saline areas are often put under cultivation

with a resultant weed growth instead of crop. Many areas of light, dry soil which should have been left under native grassland were ploughed and eventually became covered with Russian thistle, tumbling mustard and other weeds.

What does the future hold for weeds in Western Canada? Currently most farmers lean upon 2,4-D and other chemical herbicides as their panacea. Use of these herbicides may result in clean fields where mustard and other susceptible species are predominant. But will other weeds replace these species? We have noticed in our area that where herbicides have checked Russian thistle because it is susceptible, there has been a great increase in wild buckwheat which is resistant. Competition from Russian thistle had previously restricted the growth of wild buckwheat but when released from that competition the wild buckwheat became much more abundant. Unless accompanied by good husbandry these chemically-treated fields may become the home of resistant species and the last stage may be worse than the first. The use of herbicides should be considered as supplementary to good husbandry, not as a substitute for it.

Although this may be an heretical thought to raise at a meeting of weed control personnel, I believe there are



two sides to the problem of weeds. Weeds are not entirely bad. Nature abhors a vacuum. If we leave the soil bare and subject to erosion, weeds are usually the first plants to move in and cover it. Far better a patch of weeds than an unsightly area of eroded soil. Man can control weeds but he cannot make soil. When unproductive fields are abandoned or other soil left bare the first plants to cover it are usually annual weeds. These are followed by perennial weeds which, in turn, ultimately are succeeded by the native vegetation of the region.

Pastures on native grassland are frequently overgrazed today, as in past centuries, to the extent that palatable plants become seriously depleted while unpalatable weeds such as pasture sage, broomweed, etc., increase in density and size. When asked how to kill these pasture weeds I always advise the removal of the cause first. In a way those weeds are

protectors of the pasture. By their abundance they indicate the fact of overgrazing. They aid the recovery of native grasses by holding snow and reducing wind and water erosion. Ultimately they revert to their normal position as a minor component of the native vegetation. Good husbandry will keep weeds under control as well as provide the farmer with a fair return from the land under his care.

It is well to be mindful of the probability that there will always be weeds. Man is continually disturbing the land surface, attempting to grow plants of his own choice in areas where other plants normally occur. The latter he calls weeds. In many instances those weeds are beneficial to him. Before destroying them he should stop to consider why they are present and, if possible, first remove the causes. Weeds, as I have indicated, are often nature's method of correcting man's mistakes.

## Snowy Plover Taken in Saskatchewan

by Douglas E. Wade, Regina

On May 31, 1964, a Snowy Plover (*Charadrius alexandrinus*) was discovered by my wife, Dorothy R. Wade, at Buck Lake, 18 miles south of Regina. Later the same day, at our request, the plover was collected by Elmer Fox of Regina. Robert W. Nero, ornithologist on the Regina Campus of the University of Saskatchewan, who prepared the specimen (a male) as a study skin, submitted it for subspecific determination to W. Earl Godfrey, Acting Chief Zoologist, National Museum of Canada, who identified it as the western race of Snowy Plover, *Charadrius alexandrinus nivosus* (Cassin). This race is confined largely to the Pacific coast from southern Washington to southern Lower California and inland from northern Utah and Kansas south to New Mexico and northern Texas. An eastern race, *C. a. tenuirostris* (Lawrence), is found in the Gulf States from Florida to Texas and in Cuba and other islands.

The Snowy Plover has been collected but twice previously in Canada; a specimen was taken in Toronto, Ontario, May, 1880, and again

in the same city in July, 1897 (Bent, 1929); both have been assigned to the eastern race (A.O.U., 1957). The casual or accidental records for the western race include Wyoming and Nebraska (A.O.U., 1957), but Peterson (1961) includes Montana and omits Nebraska. Its occurrence in Saskatchewan must also be regarded as accidental.

\* \* \* \*

Buck Lake, where the Snowy Plover was found, has been one of our favorite birding areas during the past four years. Not one of our trips there has been disappointing. We think of Buck Lake as a "bald" lake on "bald prairie", although the treeless plains are practically all wheat fields with some farm buildings and tree wind-breaks nearby to the west and the southwest. Here is a neat, clean-cut prairie pothole lake. As you drive down the road you don't see the lake until you are almost into the depression. The lake is circular, shallow and muddy-looking; it and the exposed mud beach that grows quite wide during drouthy spells have very little marsh or aquatic



vegetation. There must be a reason for this barrenness, but we haven't figured it out. Here is one of the few pieces of water south of Regina for 25 miles that hasn't been drained away or dried up entirely since 1956. Although it fluctuates in size it is now about 130 acres.

On that afternoon of Sunday, May 31st, we were the only birders in the vicinity. We had gone down about 3:00 p.m. primarily to get a count on the Canvasbacks. It was a good day to be out birding. A north wind scarcely rippled the surface of the lake; the sky was clear overhead and the air temperatures were in the mid sixties. It was, however, one of those days on the prairie when distant buildings and wind-breaks seemed to float free and appeared bulkier and taller than they actually were. In the right places you might get some good mirages; for instance, the Dirt Hills 15 to 20 miles to the west loomed up like a mountain range. At close range around the lake, the day wasn't hot enough to affect our birding with heat shimmers.

We spotted a few Mallards, Pintails, Gadwalls and Widgeon; and there were about 50 Ruddy Ducks and one Western Grebe, some Eared Grebes and two Pied-billed Grebes to be seen. We counted at least two dozen Lesser Scaup and 40 Blue-winged Teal. The teal were packed into small groups and were staying close to shore. Four male Buffleheads stood out, even though they were on the far side. One female merganser, probably a Red-breasted, swam along at a brisk pace. There was a mixed flock of over a hundred Ring-billed and Franklin's Gulls. Although not abundant, Black and Common Terns were noticeable in flight and sound as they quartered the lake. Black-birds were noticeably uncommon.

Along the shore near us, two pairs of Willets and two pairs of Marbled Godwits fed. Around the lake there were, we estimated, about 50 American Avocets; we knew of at least four Avocet nests, each with four eggs. Four other Avocets, which we thought were nesting, would, when flushed, lead us away with a broken-wing display or "feeding antics" such as moving along in shallow water sweeping the bill sideways.

Across the lake we could easily make out the pattern of Black-bellied

Plovers, and we counted precisely 43. Four or five flocks of Sanderlings, eight to ten each, were constantly cruising the shore and touching down to feed. We marvelled at the speed shown by individual Sanderlings dashing after one another. At least three Spotted Sandpipers trailed with the Sanderlings. One lone Dunlin was prominent.

To get a count on the Canvasbacks and a few Redheads, I was to remain on the west side with the sun to my back, while Dot worked around the north and east side, then closed in along the south side. In this way, we thought we could double check the shorebirds and keep the ducks moving so I could get a look at them. Dot was half-way around the lake on this planned procedure when she first saw the Snowy Plover. Here is her story:

"I was near the Black-bellied Plovers and some Sanderlings when I saw a very white, small shorebird which I thought at first was a Piping Plover. When the bird turned so I could see its entire white front, I knew almost immediately I was looking at a Snowy Plover. A few days previously while birding at Strawberry Lakes with Margaret Belcher, Lucy Murray and Bob Nero we had seen both the Semipalmated Plover and the Piping Plover. It was then that Bob Nero had told us to look for a bird with a broken neck ring, very white down the front, and we'd have a Snowy Plover. Of course we had not been expecting to see a Snowy Plover at Strawberry Lake or elsewhere in the province, but this reminder of what to look for must have been fresh in my mind.

"I had Peterson's western guide along and for the next 15 minutes studied the bird through 7X binoculars and checked all the field marks. However, although I got to within 30 feet, I was unable to see the plover's legs. It peered at me from a depression and when I moved in still closer to try to get a look at the legs, it flew across the lake, landing south of my husband.

"I knew I had a rare find, so I started to run. If my husband could get a look at it, we could compare notes. I really was quite excited because I felt sure the Snowy Plover



was not on the Saskatchewan checklist."

While I had been working on the Canvasbacks, I could see that Dot had stopped and was giving some particular bird an extra-long study. I also saw her running and was disturbed because the Canvasbacks were going into flight. I finished the count and had about 185 Canvasbacks and 20 Redheads. Meanwhile, the plover which had flown in from across the lake had attracted my attention and as it moved leisurely along the shore, passing to within 40 feet, I was able to study all of its field markings. When Dot came within shouting distance, I yelled: "There's a strange-looking plover down the beach about one hundred yards! Where is Peterson's?" Dot told me she thought it was a Snowy Plover and we should phone or try to contact some of the birders in Regina for confirmation. After referring to Peterson's, I agreed with her that here was a Snowy Plover and at once we set out to find a phone.

Before long we had alerted a number of birders and had left word for Bob Nero to try to get to Buck Lake, hoping to obtain the backing of several observers and possibly even a specimen. We returned to Regina at 5:00 p.m., and an hour later picked up Mrs. Ruth Tempel and drove back to Buck Lake. Ruth and Dot started around the lake and before long,

almost at the original place, they spotted the Snowy Plover. The wind had shifted to the east and the lake was choppy. At about this time, Elmer Fox drove up with his family, Mrs. Fox, Reg and Doug. Fortunately for science, Elmer possessed a collecting permit and a suitable gun. I directed Elmer and his son, Reg, around the south end of the lake, pointing out about where I thought Ruth Tempel and Dot had the plover located. In a half hour and after much extremely fine stalking, the Foxes flushed the plover and Elmer brought it down with one well-aimed shot, thus positively establishing the occurrence of this species so far from its usual haunts.

Within a few minutes after this tense drama, other observers arrived, including Dr. and Mrs. George Ledingham, Bob Nero, Robert R. Taylor and Miss Carla Stein. Soon we all had a close look at the Snowy Plover. Though there were some who were sorry the bird had to be collected, all agreed that obtaining the specimen was scientifically desirable.

#### LITERATURE CITED

- American Ornithologists' Union. 1957. Checklist of North American birds. Fifth ed. 691 pp.
- Bent, A. C. 1929. Life histories of North American shore birds (Part 2). Nat'l. Mus. Bull. 146, 412 pp.
- Peterson, R. T. 1961. A field guide to western birds. Houghton-Mifflin Co. 366 pp.

## First Specimen Record of Pine Warbler for Saskatchewan

by Margaret Belcher and Robert W. Nero, Regina

A "million dollar" rain, welcomed by farmers across the prairies after a dry spring, began to fall in Regina on Saturday evening, May 2, 1964. Two days of heavy showers followed, and already by Sunday, May 3, waves of migrant sparrows, thrushes and warblers were "grounded" in the city. Large flocks of Myrtle Warblers were watched in the rain on Sunday and Monday, flying down from the branches of the leafless trees to feed on the lawns and roadways in the Legislative grounds. With the Myrtles on Sunday, May 3, were small numbers of Orange-crowned Warblers, several Black-and-white Warblers

and a Blackpoll Warbler, and the first of the season's Northern Waterthrush. Then on Monday, May 4, Palm Warblers were noted, and a first Yellow Warbler (the earliest recorded spring arrival for the Regina area). Naturally, Regina birders spent considerable time in the Legislative Grounds observing this unusual concentration of warblers, and on Tuesday and Wednesday we were still taking sandwiches to eat in the park so that we could watch them at the noon hour.

The early arrival of several of the warblers—Yellow Warbler on May 4, and Ovenbird on May 6, was an in-



teresting feature of the migration, but its highlight was certainly the first established record for Regina of the Pine Warbler *Dendroica pinus* (Wilson). The details of the sighting were recorded that day in Belcher's notes, from which we quote the following: "At noon on May 6 four of us from the Regina Campus, Lucy Murray, Amalia Pucat, Alvin Ford and myself, were checking warblers, sparrows, thrushes and empidonax flycatchers on the treed lawns north of the Legislative Buildings. A warbler flew in front of me, showing white in its tail and greenish-yellow head and back. Thinking it a Palm Warbler, I was surprised to see when it lit on the lawn that it had no chestnut cap, and a minute later when it flew into a tree, further distinguishing marks were evident—wing bars, yellow breast, greyish-white on lower abdomen and undertail coverts, and greyish legs. I called the others, and Lucy Murray and I were both able to get good views with our binoculars before I went back to the car for Peterson's **Field Guide to the birds** to help identify it. When the bird was seen to resemble Peterson's picture of the Pine Warbler, a species still listed as hypothetical on the **Field check-list of Saskatchewan birds** (4th ed., 1959), I hurried back to the Campus to bring Dr. Robert Nero. Fortunately the bird was still in the area when we returned and we soon located it again, flitting from tree to tree and perching briefly on an outer branch before it flew into the air for insects. Dr. Nero was therefore able to collect the bird, the first specimen record for Saskatchewan."

Judging by its plumage the specimen appears to be a female; unfortunately, no sign of gonads could be found—the absence of testes suggests that it was a female and the ovary may have been destroyed by shot which had hit the left side heavily. The remiges and rectrices are rather worn. It was carrying a medium amount of fat. It is preserved as a study skin at the Regina Campus. The taking of the specimen establishes definitely the occurrence of the Pine Warbler in Saskatchewan where it has been suspected for many years. In fact the A.O.U. Checklist (1957) reports the subspecies *Dendroica pinus pinus* (Wilson) as casual in

southern Saskatchewan (Wingard, Indian Head), as well as in eastern Alberta (Rochester, Castor) and North Dakota (Arnegard, Jamestown, Fargo). However, Houston and Street (1959) believed that the Wingard report, which originated with John Alden Loring, an employee of the U.S. Biological Survey who visited Wingard from July 13-31, 1895, and reported the Pine Warbler as common along the river, "must represent an error in identification, for this species could not have been 'common'." Could they have been more common in the past?

The reference in the A.O.U. Checklist to Indian Head is apparently based on the records of George Lang. "Three were seen on May 21, 1929, at Indian Head by Geo. H. Lang; the species was seen again by Lang the following day. Lang stated that they were 'moderately common. Does not breed'." (Houston, 1958:45-46). These records are from Lang's migration list of 1929; Lang kept records for many years, but unfortunately, most of his records have been lost and it is not known whether or not he had other records of this species (Manley Callin, *pers. commun.*).

The files of the Saskatchewan Museum of Natural History have an informal record left in the form of a note by N. Albulet to the effect that L. B. Potter "saw one 2 weeks ago (May 20, 1937) at Eastend."

In the Regina area, too, a number of sight records have been reported through the years. J. H. Taylor's notes (1931-1943) have occasional references to the Pine Warbler, chiefly in spring migration, as observed by himself and/or other members of a small group of enthusiastic birders who "covered" the spring migration by going out on 6:00 a.m. morning bird hikes (May 23, 1935; May 5, 1936; May 24, 1936; May 25, 1937; Sept. 6, 1937; May 28, 1939). An observation during the fall migration, August 29, 1961, was recorded in some detail in Frank Brazier's notes, with a sketch made in the field to show characteristic markings and colour. Last year (1963) a sighting was reported from the farm of the Provincial Correctional Institution near Regina by Al Binnie who



reported one "viewed at close range with binoculars", May 19.

Migrant warblers of this rather inconspicuous type are less easily identified than many showy birds, and the possibility of confusing them with other species, especially in fall plumage, makes it difficult to be certain about the identification of a rare species. In these cases, a specimen record becomes especially important, and adds significance to the previously recorded sight records. It should especially be noted that the specimen had **greyish** legs, not black as given by Peterson (1947).

According to the A.O.U. Check-list (1957), the Pine Warbler is known to breed in southern Manitoba (Winnipeg, Indian Bay). Salt and Wilk (1958:384) report for Alberta as follows: "The only specimen of the pine warbler taken in Alberta is a male collected at Castor in June, 1924. During the summer of 1928 several pairs of pine warblers were observed near the town of Athabasca. They appeared to have established territories but no direct evidence of nesting was found. There are also sight records of pine warblers at Glenevis and in the Cypress Hills." Could it breed in Saskatchewan? Griscom (Griscom and Sprunt, 1957: 176-177) reports that this species, which is especially adapted to various species

of pine trees chiefly in the eastern United States, has been steadily decreasing as a result of clearing of pine forests outside the coastal plain. "Its effort to push north and establish itself in other types of pine woods has not been conspicuously successful." However, L. H. Walkinshaw (in Griscom and Sprunt, *loc. cit.*) notes for Michigan that the Pine Warbler is found in jack pine, which is the predominant tree throughout the northern portion of the lower peninsula, seeming to prefer stands where the trees are over 25 feet in height. In view of the resemblance of its song to that of the Chipping Sparrow it may well be that we have overlooked a species which may be resident in some parts of Saskatchewan.

#### LITERATURE CITED

- American Ornithologists' Union. 1957. Check-list of North American birds. 5th edition. Baltimore. 691 pp.
- Houston, S. 1958. An evaluation of the distribution records for Saskatchewan birds in the revised edition of the A.O.U. Check-list. *Blue Jay*, 16:44-47.
- Houston, C. S., and M. G. Street. 1959. The birds of the Saskatchewan River, Carlton to Cumberland. Sask. Nat. Hist. Soc. Spec. Pub. No. 2, Regina. 205 pp.
- Salt, W. R., and A. L. Wilk. 1958. The birds of Alberta. The Queen's Printer, Edmonton. 511 pp.
- Griscom, L., and A. Sprunt, Jr. 1957. The warblers of North America. Devin-Adair Co., New York. 356 pp.
- Peterson, R. T. 1947. A field guide to the birds. Houghton Mifflin Co., Boston. 290 pp.

## Brewer's Sparrow at Regina

by Robert W. Nero, Regina

Strong southwest winds brought a large wave of migrant sparrows to the Regina district in mid-May, reaching peak numbers for Chipping Sparrows (*Spizella passerina*), and especially Clay-colored Sparrows (*Spizella pallida*), on the 16th of May, the day of the Regina Annual May Count. At noon on that day, Frank H. Brazier and I stopped for lunch in a small grove of trees surrounding abandoned farm buildings about a quarter of a mile southwest of Condie, a station about six miles northwest of Regina. It was a warm day with a dry wind that led us to seek shade. A large number of Clay-colored Sparrows evidently felt the same way, for their buzzy calls were conspicuous in the little grove. As we

sat down for lunch we heard two or three melodious notes of an unfamiliar species; we decided that whatever the species, it would likely remain in the grove for the lunch period. About 30 minutes later we searched through the trees and hedge but were unable to find any bird to which we could attribute the melodious notes; however, a short while later, upon sounding the auto horn, I was surprised to hear a song which included the notes we had heard earlier. It seemed to have responded to the horn and a moment later when I made a "shhh-shhh" sound, which I had been using to lure birds into sight, it sang again, quite close at hand and close to the base of some balsam poplar trees. I had a glimpse



of a sparrow which seemed to look like a Clay-colored Sparrow, and I at once called Frank Brazier to view it. A moment later it responded again to the lure call: it came out and perched about two feet off the ground, threw back its head and sang a loud, clear and melodious song. This was at a distance of about 10 feet and in clear view of both of us. It then flew from the tree together with another sparrow out into the open field. Though we looked for it we were unable to see anything other than what appeared to be Clay-colored Sparrows. We were both impressed with its general resemblance to a Clay-colored Sparrow, and noted that it merely seemed less well-marked than those which we had been seeing all day. However, its distinctive song—which consisted of three phrases, first a series of short, rasping notes, then a clear warbling, followed by short musical notes—left little doubt that we had seen a Brewer's Sparrow (*Spizella breweri*).

This drab sparrow with the remarkable voice nests some 140 miles away (or perhaps less) in the extreme southwestern part of the province and it was there that I first encountered it in 1962. I remember particularly how impressed I was with the close proximity of territories of Brewer's Sparrow and the Clay-colored Sparrow, the difficulty of distinguishing between them, and the great difference in their songs. Salt and Wilk (1958) note that "the males sing a rolling song more beautiful than could be expected from such colorless birds. The song starts out with buzzing sounds like those of the clay-colored sparrow but these give way to pure sweet notes which rival in quality those of the vesper and song sparrows." The same authors also note that on migration "they are occasionally found in trees with chipping and clay-colored sparrows." What was possibly another Brewer's Sparrow was observed in the morning of May 20 in Regina by Mrs. Herbert F. Tempel who reports having heard a fine, musical song coming from bushes in her yard. Two birds, of Clay-colored Sparrow appearance, were seen and it was felt that one of these must have been the source of the song, which fitted the description

of Brewer's Sparrow given in Peterson's Field Guide.

Ordinarily this species is resident in the extreme southwestern part of the province, in the arid short grass plains region. Earl W. Godfrey (1950 Birds of the Cypress Hills and Flotten Lake regions, Saskatchewan. Nat. Mus. Can., Bull. No. 120, Biol. Ser. No. 40) found it "not uncommon" on the open plains south and north of Cypress Hills, and cites records for the Frenchman River at Eastend, Cypress Lake, Cummings, Piapot, and Govenlock. Fred G. Bard records finding it east of Val Marie with a nest with three fresh eggs on June 5, 1929 (per. communication). In company with Ralph D. Carson and Bernard Haysom on May 26-27, 1962 I found Brewer's Sparrow common along the valley of the Frenchman Creek to about 30 miles east of Val Marie, or as far as we travelled. It may well range farther north. Fred Bard's records also include mention of a specimen taken on May 16, 1922 at Lake Johnstone (now Old Wives Lake) by C. G. Harrold, who notes that this was the only one seen (Harrold, C. G., 1933. Notes on the birds found at Lake Johnston and Last Mountain Lake, Saskatchewan, during April and May, 1922. *Wilson Bulletin*, 65:16-26.).

In these dry years the Brewer's Sparrow may be more successful than usual (no pun intended) and we should look in likely areas of sage brush flats for its possible occurrence. The present invasion of Lark Buntings, etc., supports the view that widespread climatological changes have affected the present distribution of certain prairie species. It would seem to be a suitable time, too, to look for the return of the Dickcissel (see Belcher, M. 1961. Birds of Regina, Spec. Pub. No. 3, Sask. Nat. Hist. Soc., Regina). [In this connection see the note by Mrs. Keith Pator on page 111, which was received after this was written.]

**ANNUAL MEETING**  
**Saskatchewan Natural History**  
**Society**  
**October 16, 17, 1964**  
 in  
**Saskatchewan Museum of**  
**Natural History, Regina**



# Photographing the Downy Woodpecker

by H. S. Dommasch,

Medical Photography Department,  
University of Saskatchewan, Saskatoon

Most of you will agree that bird watching is very interesting and rewarding. If you are able to bring back a photographic record of what you have seen your thrills will be even greater and you will discover that "Hunting with a Camera" is fine sport.

I want to tell you—and show you—how much pleasure a woodpecker family has given to us. Early in May, 1962, my wife and I and some friends were down at Beaver Creek when a drumming sound invited us to give a closer look to the wooded area. There the woodpecker was—sitting on a dead limb, hammering with his bill so fast that our eyes could not follow the movement of his head. The bird was slightly larger than a sparrow and the sharply barred black and white pattern of its plumage identified it as a Downy Woodpecker, the best known of the American species. We took another look at the surroundings and found some wood shavings under a dead tree which could mean that the bird was ready to build its nest here. From then on we kept the nest under steady surveillance. Over a period of days the hole got bigger and bigger until it was so large that we could not see the bird when it hopped in. Day after day we went back, knocked at the tree and one of the adult birds would just peek out of the nest entrance to look at the intruder. One day our knocking was answered by sounds like hissing and rasping cries. This sound was produced by the nestlings; finally the family had arrived.

A friend suggested that perhaps a hole could be cut in the back of the tree and a glass plate put in, through which we could take photographs. As we did not want to harm the woodpecker, we consulted Dr. S. Houston

who encouraged us to go ahead with the plans. We opened the back of the tree very carefully and found that the nestlings were 8½ inches below the entrance. The noisy youngsters were naked and homely looking. (I believe when we were born we did not look any better—except to our parents.) We observed that the male, who has a bright red spot on the back of his head was more active in feeding the youngsters than the female. After 6-8 days we noticed that the mother bird did not come back to the nest and we were worried about her until we read that the female sometimes loses interest in her offspring long before they leave the nest. Dad had taken charge of the family. "Well," I said to my wife, "if that isn't just like a woman!"

When the young were only a few days old the food was mashed to fine pieces, but the chunks of food got bigger and bigger as the nestlings grew. You would hardly expect a woodpecker to capture flying insects in mid air, but they have been observed doing this. We actually saw the adult bird feeding moths and butterflies to the young.

It was a fascinating experience to watch the family of woodpeckers through the "window", but I would like to make a few points clear. The lucite plate which we used instead of glass was just put in for 30-45 minutes while we took our pictures. We always made sure that the sun at no time was shining into the nest, so the nestlings were protected from its scorching rays. Wildlife photography is a lot of fun—but you as the photographer are responsible for the animals' welfare during and after the shooting session. Remember that no bird picture is worth the taking if it means death to the nestlings.



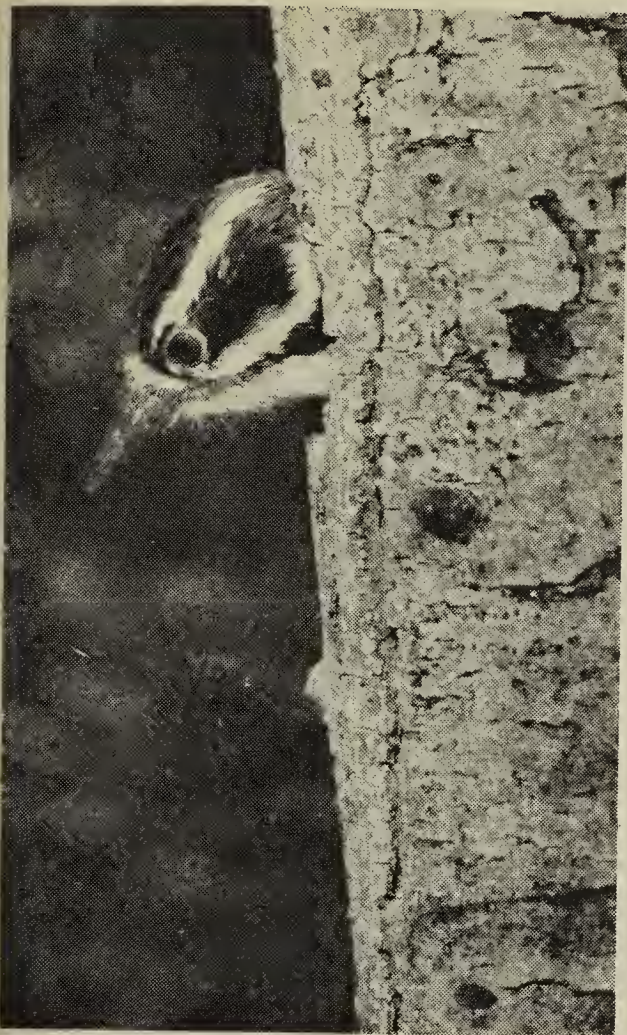


Photo by H. S. Dommasch.

The Downy Woodpecker is slightly larger than a sparrow. The tail feathers are very stiff and pointed and serve as a prop when the bird is clinging to a tree trunk.



# DOWNY WOODPECKER — Photographs by H. S. Dommasch



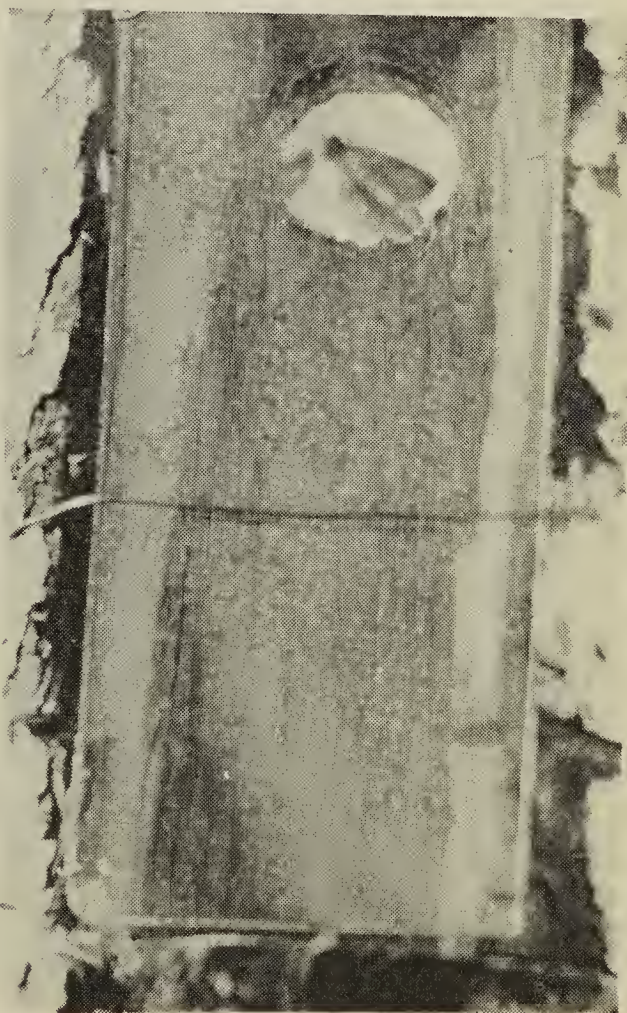
The female is looking out to see who is knocking at the tree.



"Hello children I am coming down."



"Hey! What are you doing there?"



Inside the nest. A butterfly is about to be brought in.





Putting a lucite plate in the back wall of the nest, 15 feet up in a dead aspen, so that the young Downy Woodpeckers could be photographed.





Photo by H. S. Dommasch.

The Downy Woodpecker feeding a young bird in its nest in a dead aspen. Three young birds can be seen in the photo.



# Two Possible Wild Hybrids of the White-fronted Goose x Snow Goose

by Alex Dzubin

Canadian Wildlife Service, Saskatoon

Natural hybrids between species of geese are not common, although numbers are reported in penned collections. Two possible wild hybrids of a cross between the White-fronted Goose (*Anser albifrons*) and the Snow Goose (*Chen hyperborea*) are described from the Kindersley-Kerrobert districts of Saskatchewan.\* On October 5, 1962, I observed two aberrant-appearing geese on Buffalo Coulee Lake (51° 46' N; 109° 18' W), four miles north and four miles west of Coleville. They were examined for an hour, from a vehicle, with a 40-power scope from the distance of 175-200 yards. Visibility was excellent under a clear sky. No attempt was made to collect the hybrids as they were in a game preserve. The lake was also being utilized as a banding site for White-fronted Geese. The presence of both Snow Geese and White-fronted Geese within 100 yards of the suspected hybrids made direct comparisons possible. In this paper the possible hybrids are designated as "A" and "B".

It is a pleasure to acknowledge the comments and help given by Don Flook and Jim Bendell.

## Description

In both birds the head color was a mottled dark grey. Bird A had a whitish-grey patch behind the bill which resembled the white forehead of an adult white-front. Bird B had a grey forehead but a lighter grey patch existed on both cheeks, one to one and one-half inches in diameter. The patch was smaller than one which might be found on a Canada Goose and was located closer to the mandibles. As far as could be determined the color about the eye was dark. The bill on bird A was orange-pink in color, not unlike that of a few nearby White-fronts, but certainly

brighter. Most western Saskatchewan White-fronts have light pink or pink mandibles. Areas of apparent wear, i.e. top and lateral edges of the mandibles, junction of feathers and horny mandible, and rami of the lower mandible, can become quite orange and yellow-orange. Bird B had a definitely light colored pinkish-orange bill. The most striking feature was the dark black grinning patch — similar to those of nearby Snow Geese. Mandibles of both A and B did not seem to be as large or as massive as those of Snow Geese but were larger than those of White-fronts. The neck on both individuals was dark grey, the same color as the head. On bird A this color encompassed the breast area while in B the grey fused into a white breast near the junction of neck and body.

On both birds the belly was pure white with white feathers extending into the under-tail coverts. The tail appeared dark grey in both geese with no apparent whiteness on the rectrices. I was not able to observe the color of the upper tail as it was covered with the folded primaries. Leg color in both A and B was light orange, lighter than in surrounding White-fronts but with an indication of some pink. In both birds the back was dark grey-brown and appeared lightly streaked. The wing coverts were of the same grey-brown color. In general, the color of the upper wing and back was more similar to White-front coloring but greyer. However, the tertials were long, white-edged and reminded me of tertials of the Blue Goose (*Chen caerulescens*). In all, the wings were darker than those of the nearby White-fronts and did not show the blue hue. The overall size of the two birds appeared about one-quarter larger than adult White-fronts.

## Behaviour

The apparent hybrids were more aggressive than the White-fronts with which they associated. They regularly pecked at nearby geese,

\*Correspondence between Frank H. Brazier, myself, and Mr. Edgar Sibbald of Conquest, Saskatchewan suggests that the latter may have shot a similar hybrid near Kerrobert during the latter part of October, 1963. Unfortunately, the specimen was not saved and few details are available.



which tended to avoid the hybrids when they walked through the flock. Their feeding behaviour consisted of seeking tubers and roots in the soft mud, behaviour reminiscent of feeding patterns of Snow Geese. Their general stance, especially when alert and walking, resembled Snow Geese, yet they invariably mixed with White-fronts, even though flocks of Snow Geese were nearby. On October 6 and 11, they were still associated as a couple. On October 6 they returned from a feeding flight with a flock of 35 White-fronts, and on October 11 they were found resting on a mud flat near several hundred White-fronts. The continued association of the two birds suggests that they may have come from the same brood.

### Discussion

On the basis of the duality of body characters of the two birds and a comparison of my descriptions with published observations of hybrids I submit these sightings as valid hybrid records of a White-front x Snow Goose cross. Salomonsen (1946) describes several hybrids resulting from a mating between a Greenland White-fronted Goose (*A. a. flavirostris*) and a lesser Snow Goose from an estate in Denmark. The colors of those hybrids were quite similar to the ones seen at Buffalo Coulee. The legs and feet of one bird were pale orange with webs paler and yellowish pink. The legs on two others were reddish with webs again yellowish pink. In the Saskatchewan birds, both foot and bill colors were nearer White-front than Snow Goose. The black gape was typically Snow Goose while the belly was completely white. Salomonsen (1946) took particular note of the grey neck in his specimens and indicated that it resembled the blue phase of the Snow Goose. His specimens also showed a brighter white forehead and cheek spots than the Saskatchewan birds. However, the Danish birds were adults, whereas the Saskatchewan birds may have been immatures. The white foreheads of the latter were not as developed as the specimens from Denmark. Lonnberg (1941) had previously described a White-front x Snow hybrid that showed white margins on the tertials—similar to the Saskatchewan birds and certainly a Blue Goose character. Delacour (1954) and Cooch and

Beardmore (1959) have already discussed the Blue-Snow Goose color complex.

Of the five hybrids described by Salomonsen, some show intermediate characters between both parents, and some show definite Blue Goose characteristics. Most body parts and colors were predominantly Snow Goose type. He discusses plumage color differences between male and female hybrids and claims a possible color linkage on the sex chromosome. Three males had grey-black rumps and heads, while the two females had white backs and rumps. The heads of the females were particularly white. On this basis, the two Saskatchewan birds may have been males.

It is difficult to assign the parents of the hybrids observed in this case to either a light blue-phase-Snow or Snow Goose, since no specimen is available and the hybrids show characters from the two color phases. Hybrids of both Snow Goose and Blue Goose x White-front have been reported numerous times in penned birds (Gray, 1958). The Saskatchewan birds were apparently wild and therefore originated through a natural cross. One can only speculate as to their area of origin. Snow Geese and White-fronts breed in close proximity to each other at Anderson River, N.W.T., while both Snow Geese and a few Blue Geese breed within several miles of the White-front in the Perry River and Thelon River areas, N.W.T. (Barry, *pers. comm.*).

Hybrid matings between *Anser* x *Chen*, *Anser* x *Branta*, *Anser* x *Cygnus* and *Anser* sp. x *Anser* sp. have been reported and documented in great detail by Sibley (1938) and especially Gray (1958). Yearly reports of such hybrids are made by the Wildfowl Trust (Anonymous, 1952). Most of the hybrids have resulted from birds kept together in waterfowl collections. At one time or another White-fronts have apparently crossed with most species of grey, black and white geese. Crosses between White-fronted Geese of the European and Greenland forms with various Snow Goose types (lesser, greater and blue phase) are quite common, although natural hybrids are rare. Wild hybrids, other than those reported by Gray (1958) from White-front x Canada Goose (*B. c.*



*hutchinsi*), have been reported from Sarqaq, on the Nugssauq Peninsula of Greenland, by Salmonsén (1950). Alpheraky (1905) mentions a young female hybrid resulting from a cross between a White-front and Bean Goose (*Anser fabalis*). Another White-front x Snow Goose is apparently described in an early paper by Schenk (1925-26) but I was not able to examine this record. Taverner (1940) mentions that a hybrid specimen of Blue Goose x White-front, taken at Fort Chipewyan, N.W.T., in 1913, is located in the National Museum of Canada.

#### LITERATURE CITED

- Alpheraky, Sergius. 1905. The geese of Europe and Asia. London. Rowland Ward Ltd., London.
- Anonymous. 1952. Hybrids. Severn Wildfowl Trust Ann. Rept., 5:53 (see also 1950 Rept. 3:38; 1951 Rept. 4:36; 1953 Rept. 6:9; 1954 Rept. 7:53; 1957 Rept. 9:19-20).
- Cooch, F. G., and J. A. Beardmore. 1959. Asortive mating and reciprocal differences in the blue-snow goose complex. *Nature*, 183:1833-34.
- Delacour, Jean. 1954. The Waterfowl of the World. Vol. I. London, Country Life Ltd. 284 pp.
- Gray, Annie P. 1958. Bird hybrids. A check-list with bibliography. Commonwealth Agricultural Bureau. Tech. Comm. No. 13. Farnham Royal.
- Lönnerberg, E. 1941. Further notes on some interesting goose hybrids. *Arkiv for Zoologi*. Vol. 33 B No. 13. (Not seen; in Salomonsén 1946.)
- Salomonsén, Finn. 1946. Notes on some goose hybrids. *Göteborgs Kungl Vetenskaps — och Vitterhets — Samhälles Handlingar*. Ser. B Band 3, No. 10: 1-14.
- Salomonsén, Finn. 1950. The Birds of Greenland. Copenhagen. Ejnar Munksgaard. 608 pp.
- Schenk, Jakob. 1925-26. Feher vadludak magvarorszager on - Weisse wildgänse in Ungarn. *Aquila*, 32-33: 139-146.
- Sibley, C. L. 1938. Hybrids of and with North American Anatidae. *Proc. Intern. Ornith. Congr.* 9: 327-335. Rouen.
- Taverner, P. A. 1940. The nesting of Ross's Goose *Chen rossii*. *The Canad. Field-Nat.*, 54 (9): 127-130.

## Fourth Annual May Day Bird Count

Regina Natural History Society, May 16, 1964

The Regina May bird census on May 16, 1964, recorded 141 species of birds in an area approximating the circle of 15-mile radius described for the **Birds of Regina** (1961). Vic Wilshire was in charge of organizing the parties in the six zones. Of special interest was the observation for the first time in the Regina area, of a **Brewer's Sparrow** (see article by R. W. Nero, p. 99).

**SPECIES LIST:** Red-necked Grebe 4; Horned Grebe, 39; Eared Grebe, 117; Western Grebe, 19; Pied-billed Grebe, 10; Double-crested Cormorant, 3; Great Blue Heron, 2; Black-crowned Night Heron, 18; Mute Swan, 5; Whistling Swan, 5; Trumpeter Swan, 1; Canada Goose, 245 (including 90 young); Mallard, 314; Gadwall, 77; Pintail, 79; Green-winged Teal, 18; Blue-winged Teal, 320; American Widgeon, 182; Shoveler, 94; Redhead, 40; Ring-necked Duck, 1; Canvasback, 83; Lesser Scaup, 100; Common Goldeneye, 1; Bufflehead, 1; Ruddy Duck, 79; Red-tailed Hawk, 3; Swainson's Hawk, 5; Marsh Hawk, 4; Sharp-tailed Grouse, 13; Ring-necked Pheasant, 4; Gray Partridge, 42; Sora, 16; American Coot, 189; Semipalmated Plover, 1; Killdeer, 89; American Golden Plover, 474; Black-bellied Plover, 9; Ruddy Turnstone, 1; Common Snipe, 2; Upland Plover, 8; Spotted Sandpiper, 14; Solitary Sandpiper, 6; Willet, 48; Lesser Yellowlegs, 17; Pectoral Sandpiper, 274; White-rumped Sandpiper, 4; Baird's Sandpiper, 11; Least Sandpiper, 73; Long-billed Dowitcher, 32; Stilt Sandpiper, 11; Semipalmated Sandpiper, 36; Marbled Godwit, 36; Sanderling, 21; American Avocet, 15; Wilson's Phalarope, 170; Northern Phalarope, 35; Ring-billed Gull, 47; Franklin's Gull, 155; Common Tern, 40+; Black Tern, 292; Rock Dove, 54; Mourning Dove, 60; Great Horned Owl, 3; Burrowing

Owl, 7; Short-eared Owl, 1; Common Nighthawk, 3; Belted Kingfisher, 1; Yellow-shafted Flicker, 9 (plus 3 hybrids); Red-shafted Flicker, 1; Downy Woodpecker, 1; Eastern Kingbird, 37; Western Kingbird, 73; Eastern Phoebe, 1; Say's Phoebe, 3; Traill's Flycatcher, 11; Least Flycatcher, 47 (with 24 *Empidonax* not identified); Western Wood Pewee, 3; Olive-sided Flycatcher, 1; Horned Lark, 425+; Tree Swallow, 51+; Bank Swallow, 24; Barn Swallow, 86; Cliff Swallow, 1; Purple Martin, 26; Black-billed Magpie, 61; Common Crow, 126; Red-breasted Nuthatch, 1; House Wren, 8; Brown Thrasher, 34; Robin, 81; Swainson's Thrush, 56; Grey-cheeked Thrush, 13; Veery, 1; Ruby-crowned Kinglet, 3; Water Pipit, 1; Cedar Waxwing, 1; Loggerhead Shrike, 20; Starling, 18; Solitary Vireo, 1; Philadelphia Vireo, 1; Warbling Vireo, 2; Tennessee Warbler, 10; Orange-crowned Warbler, 23; Yellow Warbler, 112; Magnolia Warbler, 1; Myrtle Warbler, 53; Blackpoll Warbler, 6; Palm Warbler, 2; Northern Waterthrush, 5; Mourning Warbler, 1; Yellowthroat, 8; American Redstart, 9; House Sparrow 395+; Western Meadowlark, 192; Yellow-headed Blackbird, 220; Red-winged Blackbird, 971; Baltimore Oriole, 50; Brewer's Blackbird, 172; Common Grackle, 92+; Brown-headed Cowbird, 193; Rose-breasted Grosbeak, 4; American Goldfinch, 2; Rufous-sided Towhee, 14; Lark Bunting, 41; Savannah Sparrow, 73; Baird's Sparrow, 3; Vesper Sparrow, 69; Lark Sparrow, 1; Chipping Sparrow, 646; Clay-colored Sparrow, 837; **Brewer's Sparrow**, 1; Harris' Sparrow, 41; White-crowned Sparrow, 61; White-throated Sparrow, 18; Lincoln's Sparrow, 14; Swamp Sparrow, 3; Song Sparrow, 29; McCown's Longspur, 69; Lapland Longspur, 3246; Chestnut-collared Longspur, 77. — **Dorothy Wade**, compiler.



## Sandhill Crane Nesting Record for Southern Saskatchewan



Photo by Mr. J. W. Inglis.

Downy young Sandhill Crane, June 14, 1964.

Mr. J. W. Inglis of Traynor, Saskatchewan, recently submitted to us two color slides of a downy young Sandhill Crane. These are of particular interest inasmuch as they were taken by Mr. Inglis "on June 14, 1964, in the community pasture about 10 miles north of Traynor." Traynor is about 75 miles west of Saskatoon. On one of the slides, reproduced above, one can see that the young crane still bears the egg tooth, an indication that the bird was less than a week or two old. In this connection, note that June 2 is listed as the average of four hatching dates for this species in Canada (Walkinshaw, L. H. 1959. The Sandhill Cranes. Cranbrook Inst. of Sci., Bull. #29, Bloomfield Hills, Michigan.). The scarcity of crane breeding records in Saskatchewan in recent years, especially in the south, was pointed out in an article in the Blue Jay in 1960, to which interested readers are referred (Walkinshaw, L. H. 1960. Summer records of the Sandhill Crane in Saskatchewan. Blue Jay, 18:20-23). Mr. Inglis deserves thanks for having brought to

our attention this interesting observation of the nesting of a species which has largely disappeared as a resident in this part of its range. Although his success as a photographer is evident from the black and white reproduction shown here, we regret that we are unable to show the original color slide.—The Editors.

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### LAZULI BUNTING IN MOOSE JAW

by Rosalind Taylor, Moose Jaw

Early in the morning of July 9 I saw a flash of vivid blue winging across our garden, but the glimpse was too fleeting to identify it. Later the same morning I stepped out onto the porch, binoculars in hand, to look at a bird I saw on the telephone wire, but I didn't look at that bird, for my eyes caught sight of that same lovely turquoise blue and there, perched on top of the telephone pole only a few yards away, was a beautiful male Lazuli Bunting.



## Crow and Mallard Nesting in Close Proximity

by John B. Millar, Canadian Wildlife Service, Saskatoon



View of the shelterbelt on an abandoned farm east of Swift Current, Saskatchewan, showing the location of the nests of a crow (left-hand arrow) and a Mallard (right-hand arrow).

On June 5, 1963, while passing an abandoned farmstead just east of Swift Current, Saskatchewan, I noticed a lone Common Crow (*Corvus brachyrhynchos*) perched on a branch of a dead tree in the shelter belt. Thinking that perhaps there would be a nest with young old enough to band, I stopped to investigate. A short search soon revealed a nest some seven or eight feet up in a small dead spruce. As I approached, a hen Mallard (*Anas platyrhynchos*) flushed from an old crow nest six feet up in another dead spruce not 15 feet from the first tree. I began to work my way through the underbrush to the Mallard's tree and as I did so eight newly hatched ducklings tumbled from the nest one by one and scurried away into the deep grass. A quick examination of the nest revealed that all eggs had hatched successfully. I then returned to the first nest and flushed a crow off a clutch of five eggs.

It is evident since the Mallard had hatched her brood while the crows

were still incubating, that she had begun nesting before they arrived and therefore it seems certain that the crows would have discovered the duck while searching for a nest site. Furthermore, the positions of the two nests were such that the sitting birds were in full view of each other at all times. Considering the crow's reputation as a ruthless predator of duck nests it is noteworthy that this Mallard was able to incubate a clutch of eggs successfully in such an exposed position in close proximity to this breeding pair.

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### AN UNUSUAL GULL ACCIDENT

by John B. Millar,

Canadian Wildlife Service, Saskatoon

On September 19, 1961, I visited the site of a colony of Ring-billed Gulls (*Larus delawarensis*) and California Gulls (*Larus californicus*) on a peninsula (formerly an island)



on the east shore of Last Mountain Lake, west of Cymric, Saskatchewan, to check for bands on the carcasses of birds that had died in the colony. As I picked up one dessicated carcass I noticed a wooden fishing plug bearing three treble hooks apparently entangled in the legs. Closer inspection revealed that a barb of one hook had pierced the web between the toes of the left foot, and a barb of a second was embedded in the skin over the tibia of the right leg, thus effectively hobbling the bird. In trying to reconstruct this incident it seems likely that the bird stepped on the hook which pierced the web of its foot and in the struggle to free itself threw the plug about in such a manner that the second hook embedded itself in the right leg. The actual cause of death might have been either starvation or predation as the entire front portion of the body, including the wings, was missing.

Positive species identification of the bird was not possible owing to the condition of the remains. However, on the basis of the size of the bird and the composition of the colony, which has been estimated by Stuart Houston (personal communication) to be roughly 40 Ring-billed Gulls to one California Gull, it seems reasonable to suppose that it was a Ring-billed Gull.



Carcass of gull showing the hooks of the fishing plug embedded in the legs.

## GRAY-CROWNED ROSY FINCH RECORD

by Mrs. Hope Johnson, Ralston,  
Alberta

About the middle of February, 1964, I was down on the South Saskatchewan River banks, at a point some 10 miles west of Medicine Hat. This is a badland area, with very deep eroded coulees. It was a fine but rather cool day. My 16-year-old son and a 10-year-old local boy were with me. We were quite surprised to see about five pairs of unusual (to me) birds flitting about in a deep sheltered gully. I had binoculars and was able to see quite a bit of detail of colour, beak shape, etc. I decided that they were "some sort of finch" but was quite unfamiliar with the species. After studying Peterson's **A Field Guide to Western Birds** I decided that they were Gray-crowned Rosy Finch. They were rather tame, and rather curious, as they flew close to us quite a few times, though quite rapidly. I do remember a small black patch above a light beak and a pink shading which was particularly well shown off as the birds flew by. The chestnut coloured body reminded me of the colour of a Ruddy Duck.

## DICKCISSEL AT OXBOW, SASK.

by Mrs. Keith Paton, Oxbow

On June 13, 1964, I saw my first Dickcissel, sitting on a willow on a prairie trail. He was singing his best and looked exactly like "a little meadowlark".

Having been interested for many years in the birds here on our farm at Oxbow, we have been able to notice changes in bird populations, some of them apparently related to cycles of dry weather in Saskatchewan. The Lark Bunting has always been a very scarce bird here till this year. But this year we have seen a great many of them; and on a trip about 200 miles south into North Dakota, we saw hundreds of them! They were singing everywhere.

**Editor's Note:** The status of this species in Saskatchewan is discussed by Margaret Belcher in the **Birds of Regina**, 1961. Special Publ. No. 3, Sask. Nat. Hist. Soc., Regina.



# A Wild Flax of the Dry Prairies

by Keith Best, Swift Current



Lewis' Wild Flax, *Linum lewisii*

*Linum*, a genus of annual or perennial herbs of the relatively small flax family (*Linaceae*), consists of between 90 and 100 species. Linen thread, manufactured from the cultivated flax (*L. usitatissimum*) is the most important vegetable fiber from the standpoint of long-continued and widespread usage. Its use dates back to the dawn of history, which is indicated by its similarity in European languages. Thus, Greek **linon**, Latin **linum**, Anglo-Saxon **linen**, German **leinen** and Swedish **linne** all refer to flax. Our English words "line" (literally, linen thread), "linen", and "linseed" are all from the same source.

Lewis' Wild Flax or Prairie Flax (*Linum lewisii*) was named by the botanist Pursh in honor of Capt. Meriweather Lewis of the famous Lewis and Clark expedition, who first collected the plant. Lewis found fields of the wild blue flax in Montana and was keenly interested in this perennial-rooted species.

Growing from a woody, perennial taproot, the densely tufted stems are erect, often branched above and up to 2½ feet in height. The narrow linear leaves are erect and borne alternately on the stem. They are from ½ to 1 inch long, sharp-pointed, hairless and without stalks. The flowers are blue (rarely white), stalked and usually occur in several flat-topped clusters. The 5 blue petals are about ¾ inch long, but soon fall off. The sepals are 5 in number, and up to ¼ inch long. They have 3 to 5 nerves, are sharp-pointed, and remain attached to the seed pod. The seed pod or capsule consists of 5 chambers, each containing two elongated, lens-shaped seeds.

Although common over the prairies and foothills where it often forms dense stands, it is also found as high as 10,000 feet in the coniferous timber lands of Colorado. It is rated as worthless, poor, or when young and tender in the spring, occasionally fair forage. The Klamath Indians produced a remarkably strong, fine fiber from the stems which they made into strings and cords. Today it merits cultivation as an ornamental.



## *Habenaria obtusata* and *H. bracteata*



Photo by the late W. C. McCalla.

### NATIVE ORCHIDS OF NORTH AMERICA

The two orchids shown here are both widespread across the northern parts of North America. The smaller Blunt-leaf Orchid, ***Habenaria obtusata*** (Pursh) Richards., which has a single leaf, is frequent in wet spruce woods. The larger Long-bracted Green Orchid, ***Habenaria viridis*** var. ***bracteata*** (Muhl.) Gray is fairly common in meadows and the borders of sandy woods even south of the coniferous forest. Because of their greenish color these orchids are not conspicuous but it is always thrilling to see them in their native habitats.



# Damage Done by Weed Sprays

by Mrs. E. K. Hubbard, Grenfell

We have been hearing a lot lately about the widespread use and danger of insecticides, but not as much is said about the harm done by the use of sprays to kill weeds in the crop and to keep down shrubby growth along roads and power and telephone lines. One cannot blame the farmer for using sprays to combat the weeds, or the municipality for using an effective means of keeping their roadsides clear, or the power or telephone companies for using this means of keeping down tree growth that will interfere with the operation of their lines. However, there is somebody who should be considered, who at the present time is being ignored and that is the farmer who is trying to beautify his farm grounds with shelterbelts, ornamental shrubs, perennial and annual flowers, and who may or may not have an orchard of small fruits. Here, with spray blowing in from many sources, and with the drift of fumes in still air, a great deal of damage may be done without the owner being definitely sure of the source of the harm.

Let me cite our own experience as an example. We live about one-quarter mile west of a highway which has telephone poles on one side and long distance power lines on the other. Last summer the Power Corporation (by local or provincial behest I know not) sprayed all the bush along the highway under their line. The municipality sprayed the roadsides three-quarter mile to the south and three-quarter mile to the west of our farm buildings. Then one calm evening the odour of spray came drifting in from the northwest, presumably from a neighbour's spraying during the day.

I believe the instructions that come with spray recommend that it is not to be used on windy days. This is one recommendation that is not strictly followed. I do not know whether the farmer who sprays in a 10 to 15 m.p.h. wind gets effective results from his spraying but I do know that his spray will travel a mile to a mile and a half and do damage at the end of that journey. I also know that even on what seems to be a perfectly

still day spray fumes will drift long distances.

With regard to the damage that has been done at the farm here from spray, that to the Manitoba maples in the shelterbelt is the most noticeable. These trees are now eleven years old but they have been dwarfed by yearly damage from spray. The first year I saw the elongated yellowish tips on the branches I thought they were diseased or had received insect damage, but was informed by the Forest Nursery Station at Indian Head that this was spray damage. We had done no spraying ourselves that year. Every year these trees show the same damage. It looks as if Manitoba maples are doomed.

Many types of plants show damage from weed killers without being killed, or immediately killed. The growing tips of their branches or stems are elongated unnaturally, frequently are twisted, sometimes the foliage is lighter in colour than on the rest of the plant, frequently the plant's flowering is reduced or stopped altogether and the plant or tree becomes stunted. Manitoba maple, ginnala maple, tree lilacs, honeysuckle and spireas show the branch damage, though only the tree lilacs have refused to flower. The flower stems of peonies grow very long but flowering does not seem to be restricted. Daylilies, on the other hand, hardly flower at all, and the few flowers they do have are on very long flower stalks.

Two Heyer apples in the orchard this summer showed this extreme tip growth but had an enormous crop of apples; it will be interesting to see if they survive. I am now wondering if well-established Rescue apples and some plum trees which suddenly died without any visible cause may not have been harmed by spray.

One perennial that is evidently very susceptible is the double Golden Glow. It produced elongated twisted stems which turned black and died the year of damage, and the whole plant was dead the next spring.

These are just some of the effects of spraying that I have noticed myself. With spraying as widespread as



it now is this recital of spray damage must be multiplied many times across the country. I believe the time has come when we must decide if we are to allow all plants susceptible to spray to vanish entirely. Are we to sacrifice all the beauty of roadside growth to good "road" housekeeping?

I would like to make the following suggestions:

1. Before the ultimate results of widespread spraying have been reached a comprehensive study of this problem should be made by governments, agricultural organizations, natural history organizations and scientists to determine what growth will be completely eliminated, and whether efforts should be made to protect certain trees, shrubs, flowers, etc.

2. In Montana there is a law applying to aeroplane spraying that requires the farmer and operator to fill out a report concerning conditions of spraying. Any complaints arising from the spraying should be made within 30 days. If such reports had to be made both the spray operator and those ordering the spraying would tend to use more care in their operations. Such reports would form a body of information to help study the whole spray situation.

3. Information should be made available to everyone through pamphlets accompanying weed killers, through farm and garden publications, University and Experimental Farm publications, etc., of:

(a) The distances which spray will travel under different wind speeds, under various pressures, and from different heights of spraying.

(b) The various types of trees, shrubs, flowers, orchard and small fruits that are susceptible to spray. This information would alert the spray operator to the damage he may be causing to native growth, and to nearby shelterbelts, orchards, borders and gardens.

4. Lists of plants particularly susceptible to weed killers should be available for the protection of the buying public, and seed companies and nurseries should list this information in their catalogues.

5. Study should continue to find possible antidotes or action to counteract the effects of spray on susceptible plants when we know they have been exposed to spray.

**Note:** This timely article by one of our SNHS members is reprinted from **The Gardener's Bulletin**, Vol. 3, No. 2, April, 1964. Copies of it have also gone to the Saskatchewan Departments of Agriculture, Highways, and Municipal Affairs.

## Plant Distributions on Kernen's Prairie, Saskatoon

by **Graham B. K. Baines**, University of Saskatchewan, Saskatoon

Kernen's Prairie consists of 320 acres of grassland which, despite the suitability of this land for cropping, have escaped cultivation and have not experienced grazing since the 1930's. This may be the last sizeable remnant of the original grassland vegetation of the glacial lake soils of the area. It is situated approximately five miles east of Saskatoon.

This prairie, particularly when viewed from the air, appears as a mosaic of grassland interspersed with patches of shrub and Aspen Poplar (*Populus tremuloides*). Such heterogeneity of vegetation reflects the variations in soil and drainage conditions which occur in the area. During the summer of 1963 the author, for his master's research, undertook

a study of the distribution of plant species within the area in relation to these soil and drainage variations. This paper is a generalized account of the flora, with incidental observations of the fauna; further details of the vegetation can be obtained by referring to the University of Saskatchewan, M. Sc. thesis, **Plant distribution on a Saskatchewan prairie in relation to edaphic and physiographic factors**.

Slopes in the area are very slight and never exceed about two degrees yet this suffices to produce a pronounced change in habitat. The amount of soil moisture increases, as does the soil organic matter, depth of soil and acidity as one proceeds downslope from the relatively dry



central ridge. The most important factor in relation to the distribution of plant species in the area, appears to be soil moisture. On the ridge Speargrass (*Stipa spartea* var. *curtiseta*) and Northern Wheatgrass (*Agropyron dasystachyum*) are the dominant species. Farther downslope, the increased moisture promotes better growth of Rough Fescue (*Festuca scabrella*). As this grass increases in importance the Speargrass and Northern Wheatgrass decrease. Slender Wheatgrass (*Agropyron trachycaulum*) then appears and may reach its best development in areas similar to those in which Rough Fescue is at its best. On these lower slopes, patches of shrubs sometimes occur. The most important of these is Western Snowberry (*Symphoricarpos occidentalis*), which often forms dense stands. The leaf canopy developed by these shrubs reduces the sunlight penetrating to the ground. Light measurements taken under these shrubs indicated that the sunlight at groundlevel is often not more than ten percent of full sunlight. Certain changes take place in the grassland flora where these dense shrub canopies are present. Some species are totally excluded, e.g. Prairie Selaginella (*Selaginella densa*); others are reduced in number, e.g. Rough Fescue; while species such as Northern Bedstraw (*Galium boreale*) appear to develop just as well in the shade as in the open grassland. Though light may operate in this way as a selective agent, the factor chiefly responsible for determining which species grows where, and in what numbers, is soil moisture.

The conditions responsible for the development of dense shrub stands have not been elucidated. Under a given set of soil conditions and drainage it appears that either Fescue grasslands or shrubs may develop. It has been suggested that shrub stands develop where a pocket of water-bearing sand occurs beneath the soil surface. Borings to three feet showed no signs of such structures, though their possible occurrence at deeper levels could be significant. Perhaps shrub stands develop initially by chance, a single plant becoming established in the first instance. Subsequent vegetative development by

underground stems would result in the formation of the circular to elliptic shrub patches which are characteristic of Kernén's Prairie.

Small depressional areas, probably glacial "kettles", occur in various portions of the prairie, both on the ridge and in low areas. These are conspicuous in their dominance by Wild Barley (*Hordeum jubatum*) and are drier, in late summer, than the adjacent lower slopes. It is suspected that this condition results initially from a soil which is much more compact than that of upland areas. Being denser, the soil is less permeable to water. This means that rainwater lies longer on the surface and more is lost by evaporation than from the lower slopes. These soils are also highly saline. Whereas upland species might well be suited to the prevailing moisture conditions, they are either unable to develop under the conditions of high salinity or at least are not able to compete successfully with Wild Barley and other lowland plants. Flooding of these depressions in springtime may assist in preventing the establishment of upland species.

Although the present study was chiefly concerned with the distribution of common species, rare species are also of great interest. In this connection it is important to note the occurrence of several well-established bushes of Hoary Sagebrush (*Artemisia cana*). This is believed to be the first report of this species for the Saskatoon area. Other species common in the drier grassland of Saskatchewan but of rare occurrence in Kernén's Prairie, include Nuttall's (*Atriplex nuttallii*) and White Sage (*Eurotia lanata*). A single frond of Grape-fern (*Botrychium* sp.) was found growing beneath a dense canopy of Western Snowberry. Such a moist habitat is not unlike the usual haunts of this species. Why should it appear here so rarely?

Some observations of the fauna in Kernén's Prairie were also made in 1963. Eggs in two Mallard nests, a crow and a Marsh Hawk nest all disappeared but young Sharp-tailed Grouse and Burrowing Owls were seen. Richardson's and Thirteen-striped Ground Squirrels were fairly numerous and there was evidence of an inhabited den of the Red Fox.



## *Pinguicula vulgaris* in southern Saskatchewan

by **Gweneth J. Jones**, University of Saskatchewan, Regina

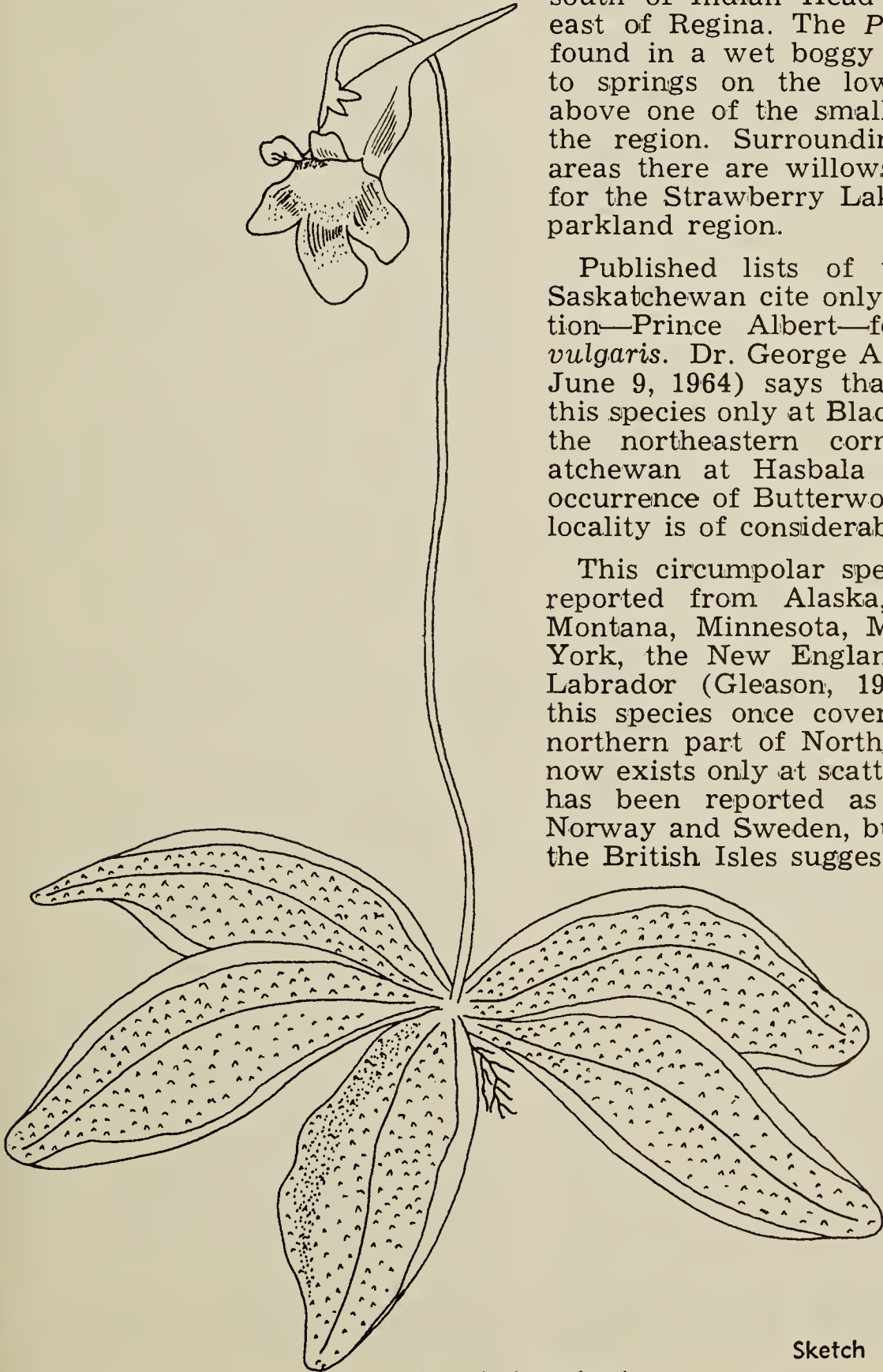
On May 28, 1964, during a botany field trip in the Strawberry Lakes region we discovered an abundant stand of *Pinguicula vulgaris*, the Common Butterwort. The plants were first noticed by Dr. G. F. Ledingham who had previously seen the species

in peat bogs at Prince Albert. Misses Lynda Roney and Janice Zacharias, research assistants at the University in Regina, were also present when the plants were found.

The Strawberry Lakes occur in a rather sandy area about 10 miles south of Indian Head and 42 miles east of Regina. The *Pinguicula* was found in a wet boggy area adjacent to springs on the low open banks above one of the small dry lakes of the region. Surrounding the boggy areas there are willows and poplars, for the Strawberry Lakes are in the parkland region.

Published lists of the plants of Saskatchewan cite only the one location—Prince Albert—for *Pinguicula vulgaris*. Dr. George Argus (letter of June 9, 1964) says that he has seen this species only at Black Lake and in the northeastern corner of Saskatchewan at Hasbala Lake; so the occurrence of Butterwort at this new locality is of considerable interest.

This circumpolar species has been reported from Alaska, Washington, Montana, Minnesota, Michigan, New York, the New England States and Labrador (Gleason, 1952). Possibly this species once covered all of the northern part of North America and now exists only at scattered points. It has been reported as abundant in Norway and Sweden, but a survey of the British Isles suggests that it may



*Pinguicula vulgaris*

Sketch by Gweneth Jones



have disappeared since no specimens have been found in recent years. *P. vulgaris* is a northern species, and as such it might be expected to disappear in the course of a gradual climatic amelioration. It was, therefore, very exciting to find this species existing in southern Saskatchewan where it has probably survived for some 10,000 years and now may be considered a post-glacial relict.

*Pinguicula vulgaris* is a small plant found in wet meadows and bogs. It may appear similar to a violet because the corolla is a rich purple color and is two-lipped, the upper lip with two parts and the lower lip with three lobes. The corolla lobes are delicately veined and the lower lobes are covered with white hairs. The corolla terminates in a long straight spur. The flowers appear in May to July on erect stalks or scapes (5-15 cm. tall) growing from the center of a basal rosette of 3 to 7 yellowish-green leaves.

The basal leaves are broadly oval or elliptic and obtuse. Each leaf may be slightly hollowed like a trough, with the upper surface covered by many hair-like stalked glands. The tip of each gland is moist with a sticky substance which is fatal to any small insect alighting on the leaf. The contact of the insect's body stim-

ulates the glands to secrete extra mucilaginous material causing the insect to become permanently trapped in this "living fly paper".

Sometimes the leaf margin curls over the victim thus aiding in its capture. The body of the insect is acted upon by an acid digestive juice and the soluble nitrogenous material is absorbed by the leaf. Not only insects but pollen grains and bits of vegetable matter falling on the leaf are also absorbed. The digestive action of the Butterwort leaf has been used for centuries by the Laplanders in making a junket-like food out of milk which has been poured over the leaves (Hylander, 1944).

The viscid or greasy appearance of the leaves is responsible for the name *Pinguicula*, derived from the Latin adjective "pinguis" meaning "somewhat fat" (Fernald, 1950).

It would be interesting to know if this plant occurs in other localities, and we would like to correspond with readers who may know of its occurrence.

#### LITERATURE CITED

- Fernald, M. L. 1950. Gray's manual of botany. American Book Co., New York.  
 Gleason, H. A. 1952. Britton and Brown illustrated flora of northeastern United States and adjacent Canada. Vol. 3. Lancaster Press, Lancaster, Penn.  
 Hylander, C. J. 1944. The world of plant life. Macmillan Co., New York.

## Corrections on Butterfly Determinations

by **Ronald Hooper, Punnicchy**

My brother Donald and I have had articles in the **Blue Jay** describing some of the species of butterflies in our collection. After sending most of our collection away and having it checked by professional lepidopterists, we find that we had made some errors in determinations which we should like to correct.

In the **Blue Jay** of March, 1953, my brother mentioned some of the butterflies we had taken at Somme, Saskatchewan. Here are the corrections that should be made for the species mentioned in that article:

**Chariclea Fritillary** should read **Purple Lesser Fritillary**

**Afra Blue** should read **Silvery Blue**

**Clouded Sulphur** should be deleted

**Western Sulphur** should read **Giant Sulphur**

**Pale Swallowtail** should read **Tiger Swallowtail**

**Northern Dusky-wing** should read **Northern Cloudy-wing**

**Sleepy Dusky-wing** should read **Dreamy Dusky-wing**

**Accius Skipper** should be deleted

In the **Blue Jay** for September, 1960, we mentioned some of the species of butterflies that we caught in the Cypress Hills. The following species should be deleted: **Chalcedon Checkerspot**, **Baird's Swallowtail**, **Creus Marble**, **Palaeno Sulphur**, **Nastes Sulphur**, **Juvenal's Dusky-wing**, **Acmon Blue**.

In the future, when we report on butterflies collected, we shall name only those species determined by experts.



# Sagebrush Vole Range Extension and Other Records

by Robert W. Nero, Regina

A male Sagebrush Vole (*Lagurus curtatus*) which was collected about 10 miles southeast of Beechy, Saskatchewan, on June 6, 1964, is the northern-most record for the province and extends the known range by about 60 miles. The nearest locality for which this species has been previously reported is Duncairn Reservoir on Swift Current Creek (Soper, 1961: 35). Soper also collected it north of Maple Creek, at Tenaille Lake; other records are farther south, from Big Muddy Lake west through the prairie dog country (e.g., see Beck, 1958: 37). The species has been recorded in Alberta north and west to Calgary (Hall and Kelson, 1959: 752). Our present record is of special interest inasmuch as the vole was collected north of the South Saskatchewan River. It is likely that the species ranges farther along the river to the north and east where there is rather continuous habitat seemingly suitable for this mouse.

According to Soper (1931) the first indication of the presence of this gray, short-tailed mouse in Saskatchewan was secured by an ornithologist, Hamilton M. Laing, who found a specimen in the nest of a Long-eared Owl at Eastend on June 20, 1921; some time later, another ornithologist, Lawrence B. Potter, found one at the entrance to a burrow of a Burrowing Owl 15 miles southwest of Eastend. Actually, an earlier specimen was obtained by a third ornithologist! H. Hedley Mitchell collected a male on July 10, 1915, at Wood Mountain, "close to a goose nest", though it was not identified as this species by him. This specimen (skin with skull enclosed) is #979 in the collection of the Saskatchewan Museum of Natural History. However, it remained for J. Dewey Soper (1931) to provide abundant specimens (33) and information on the basis of collections and studies made in 1927; additional records are cited in a later report (Soper, 1961). Persons not having access to the 1931 issue of the Canadian Field-Naturalist may wish to consult the bulletin by Rand (1948) which gives

a brief summary of the habits of this mouse in Saskatchewan as reported by Soper. It was found chiefly in the treeless area of the semi-arid, short grass plains, where there were small cacti and sage brush.

Our specimen of the Sagebrush Vole (also known as Pallid Vole) and several other mice were taken in arid upland prairie habitat between Snakebite Coulee and the South Saskatchewan River; this was outside of the valley on the prairie top. All were captured by hand in the car headlights, a technique which has already been described (Nero, 1959). Curiously, on the night of June 6, the first five mice which we saw, and which were captured, were each a different species. Our catch that night consisted of: Olive-backed Pocket Mouse (*Perognathus fasciatus*) (5); Northern Grasshopper Mouse (*Onychomys leucogaster*) (1); Deer Mouse (*Peromyscus maniculatus*) (5, and several others seen); Meadow Vole (*Microtus pennsylvanicus*) (1); and the Sagebrush Vole. On the previous night, on which it was drizzling, we narrowly missed capturing a mouse which was undoubtedly the Western Jumping Mouse (*Zapus princeps*); in addition, we caught two Grasshopper Mice, two Pocket Mice, and saw or captured several Deer Mice.

The Grasshopper Mice were kept alive in captivity, and one of them gave birth to six young about 5:15 p.m. on June 8; a second one produced a litter of four about 11:00 a.m. on June 10. (An interesting account of this carnivorous and insectivorous rodent may be found in Cahalane, 1947.) The Grasshopper Mice and some of the Pocket Mice were captured quite close to the site at which the Saskatchewan Natural History Society was encamped on its annual summer outing. Members who attended may be especially interested in these records of the small mammals of the area. Other species of interest were a Grasshopper Sparrow (*Ammodramus savannarum*), captured by Robert Taylor on the night of June 5 in the car headlights, and



a Spadefoot Toad (*Scaphiopus bombifrons*) found on the camp road by some member of the camp and brought to us in the morning of June 7. These records show that there is a need for far more study of this interesting region. It seems particularly unfortunate that so little collecting and study have been done within the area of the South Saskatchewan River valley which will soon be permanently under water.

I wish to thank Robert R. Taylor for assisting in this brief mammal "survey".

#### LITERATURE CITED

- Beck, W. H. 1958. A guide to Saskatchewan mammals. Spec. Publ. #1, Sask. Nat. Hist. Soc., Regina. 52 pp.
- Cahalane, V. H. 1947. Mammals of North America. Macmillan Co., New York. 682 pp.
- Hall, E. R., and K. R. Kelson. 1959. The mammals of North America. Vol. II. Ronald Press Co., New York. pp. 547-1083, + Index.
- Nero, R. W. 1958. Additional Pocket Mouse records. *Blue Jay*, 16:176-179.
- Rand, A. L. 1948. Mammals of the eastern Rockies and western plains of Canada. Natl. Mus. Can., Bull. No. 108, Biol. Series No. 35. Ottawa. 237 pp.
- Soper, J. D. 1931. Field notes on the Pallid Meadow Mouse, *Lagarus pallidus* (Merriam). *Can. Field-Nat.*, 45 (9):209-214.
- Soper, J. D. 1961. Field data on the mammals of southern Saskatchewan. *Can. Field-Nat.* 75:23-41.

## A COUGAR KILL NEAR KINCAID

by Tom White, Regina

In late June, 1964, I checked the report of a cougar kill south of Kincaid. A 300-pound calf had been attacked and killed and was examined by the farmer before rigor mortis set in. It was lying on the ground 20 feet from the brush on the edge of the creek and death seemed to have been instantaneous as there was no sign of a struggle. There were deep razor-like claw marks in the shoulders, and wounds in the neck and throat. The body was drained of blood though none had been shed on the ground, and some meat had been eaten from the shoulder. Five other calves had been killed recently all of which were eaten clean and all killed approximately 20 feet from the brush. One calf had been dragged 100 feet by the brisket before it was eaten. During the preceding winter cat tracks—four and a half inches in diameter—with an 18 inch stride

were followed for a quarter of a mile and periodically the animal had jumped 20 to 30 feet for no apparent reason.

Wolves, coyotes and feral dogs do not drink their kills dry and cannot kill without a struggle; the bobcat and lynx could not kill without a struggle either, and do not have the capacity to drink a calf dry. All indications point to a series of cougar kills in the Kincaid area in 1964.

## MORE LYNX RECORDS

"I believe there have always been a lynx or two around this district, especially in the hills southwest of Ethelton. But this year [letter of April 10, 1964] there have been an unusually large number reported. I did not keep the record of those reported in papers but I did talk to farmers and trappers who had shot or trapped them.

"Taking a ten-mile radius around Ethelton, this is what I have found: seven trapped by C. Cosman, three by Wm. Lambert, three by H. Selness, two by L. Eros, all in winter; one shot by G. Kearns, one by J. Mitchell, one by F. Duclaux, one by W. Hill, all in summer or fall. Add one with a mutilated foot reported in the **Melfort Journal** to have been shot in the Pleasant Valley district. We believe this to be a lynx that visited our yard. One rainy day we found several hens lying around the yard, mauled, slashed and torn so that we had to kill them. We asked H. Selness to catch whatever was killing them, but all he caught was skunks—14 of them. Two weeks later more hens were mauled; this time we saw a big grey cat, but were unable to shoot it. A few days later the report of the lynx with the mutilated foot appeared in the paper, and Mr. Selness suggested that it could have been the one which caught our hens as it would be unable to hold on to the hens after catching them.—Genevieve Belliveau, Ethelton.

Editor's Note: It was interesting to see a clipping from the **Craik Weekly News** with an item from the column "Days that are done" quoting a report of 50 years ago, May 21, 1914, "A lynx was shot on the Anderson farm west of Reber school."



# The Pasquia Hills Expedition, May, 1964

by Tom White, Regina

Eighteen members of the Regina Natural History Society spent the long weekend in May visiting the Pasquia Hills, about 200 miles north of Regina. These low rolling hills covered with trees and dense bush are one of the least known parts of the province and few people have been in the wilder parts of the area. The Indians refuse to go into some parts of the hills. Earlier in the century much of the area was trapped out which led to the formation of the Pasquia Game Preserve. The cougar in the Museum of Natural History, Regina, was trapped there in 1948, and there have been many reports of a large species of bear. The main object of the expedition was to find out what we could about these two species.

Due to the varied interests of the group we made flexible arrangements by making a base camp at a D.N.R. hut and groups then followed their special interests. The main party walked to the Mann River which is the principal river on the north of the hills. Since other food was scarce we thought that the bears would be fishing in the shallows but it took

four hours of travelling through very rough country to reach the river bank. It was a fine sight with the water roaring between high banks in a series of rapids. It was not a suitable place for bears to fish so we followed other interests and soon began our exhausting return journey.

On the following day, we walked down the main trail and shortly after leaving the truck we came upon cougar tracks in the soft mud. We took plaster casts, photos, and measurements which were subsequently authenticated in Regina and by Bruce Wright of New Brunswick who has specialized in cougar identification. There were four different sizes of track, one was that of a cub, and as some had been rained upon and others were fresh we concluded that we had found a cougar runway. We were able to follow the tracks a number of miles.

On Sunday we visited the picturesque Red Earth Indian Reserve. We collected a number of stories of large bears and it seems to me that there is a distinct possibility that there are a few plains grizzly bears remaining in the hills.

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## Weasel Attacks Full-Grown Young Mallard

by John B. Millar, Canadian Wildlife Service, Saskatoon

On August 27, 1963, as I attempted to flush a brood of newly fledged Mallards (*Anas platyrhynchos*) from a small pothole southeast of Saskatoon, there was suddenly a violent commotion and loud quacking in the vegetation ahead of me. Investigating the uproar I discovered that a Long-tailed Weasel (*Mustela longicauda*) had attacked a young male of the brood hidden on shore and succeeded in firmly gripping with its jaws the flesh of the tibial portion of the bird's right leg. As I watched, the duck gradually thrashed its way through the grasses toward open water, dragging the weasel some 15 to 20 feet from shore. At that point I intervened and the duck was released. After examining the bird to determine its age and sex, and that its

injury was not serious, I banded and released it.

Considering the nature of the grip the weasel had on the Mallard and the fact that the duck had been able to drag the weasel out into deep water where the predator was at a decided disadvantage, it might be speculated that this particular case of attempted predation would have failed even without human intervention.

I was not surprised to see the weasel attack a bird three times its own weight, for its behaviour in poultry yards is well known, but it was interesting that it would attack in spite of the presence of a human being. At the time the attack began I was no more than 30 to 40 feet away and I made a good deal of noise as I approached the animals.



## Junior Naturalists

Edited by **Joyce Deutscher**, Saskatchewan Museum of Natural History, Regina

### SO YOU HAVE NOTHING TO EXPLORE

by **Joyce Deutscher**, Saskatchewan Museum of Natural History

You have nothing but a plowed field behind your house and there aren't any trees along the sidewalk. It's miles to the nearest pond, and well, there just isn't anything to see—no birds, no trees, no flowers. Or perhaps you do have a pond next door which you visit frequently but you want to adventure into new fields of interest.

Why not try weather forecasting? One thing you are certain to have around you, the minute you step outside, is weather. Feel the air. It can be hot or cold, damp or dry, moving or still. Overhead the sky is either cloudy, clear or somewhere in between. Why not sharpen up your powers of observation and see if you can outguess the weatherman?

You will need the following equipment to start—keen eye, patience, a good imagination (you don't have much else to work with at first, so you'll have to use it) and a pencil and paper.

The old Indian used to sit outside his tipi to forecast the weather. You can do the same. Sit on your doorstep and look at the sky. Feel the wind. What direction is it from? Hold a moist finger up in the air to test it. What do you think the temperature is? Make a guess and write it down. Are there any clouds? Make a sketch of them or write down their description or name in your note book. Do the clouds look like wet weather clouds, or do they look more like fair weather clouds? Would you say they were high, medium high or low in the sky? Write down your observations about the weather. If you do some practice like this each day, you will soon improve and you can check your findings with the weather forecast in the paper or over radio or T.V. and you can also start collecting your own equipment—thermometer, weather vane, rain gauge, barometer.

Your notes are for your own use. Make sure you can understand them,

but don't worry if your great aunt Sue can't understand. You probably can't understand half the things she does either.

Can you "read" the clouds? Clouds frequently tell you what kind of weather to expect. The commonest and most easily recognized of the low clouds are cumulus. They look like a pile of milky foam in the sky and, indeed, their name comes from the Latin word for "heap". The base of these clouds is usually flat and being in their own shadow they appear dark compared to the tops of the cloud. Cumulus clouds usually indicate fair weather, unless they are very dark and piled high. However, on hot muggy days they may bring showers.

A wind from the west (a west wind) is another indication of fair weather. Is the weather on the prairies usually fair or rainy? Are the winds usually from the east or from the west? Make a simple weather vane and set it high above the ground to help you tell wind direction.

The temperature is likely to fall as a period of fair weather approaches. Place your thermometer where it is exposed to the wind but fully shaded. Take several temperature readings a day.

Air pressure is measured with a barometer. A rising barometer usually indicates fair weather. Perhaps you can find a reference book which will tell you how to make a simple barometer, but don't worry if you don't have one—the old Indian never used such "tools".

The speed of wind is another factor to consider. The speed of the wind tends to decrease as we enter a period of fair weather.

Since the general rules for forecasting fair weather are falling temperature, wind from the west and decreasing in speed, and an increase in barometric pressure you can expect the indications for rainy weather to be the opposite. Expect rainy weather, then, if the wind is from the east, the clouds are not cumulus, there is a greater than normal rise in temper-



ature as the day advances and the barometric pressure is falling.

By now you will be ready for more help than I have been able to give you in one short article. If you do not have access to a Public Library and if you live in Saskatchewan you can write to the Public Information Library, 1819 Cornwall St., Regina, Sask. They lend books free of charge.



Downy Woodpecker  
by **Brian Irving**, Kelvington

## BIRD STUDY CONTEST RESULTS

Congratulations to those five boys and girls who entered this contest! These naturalists have gone to a considerable amount of work. Two of them are "old-timers"—Brian Irving and Bohdan Pylypec. The others we welcome to our page and hope to hear from them again. The contestants were as follows: Robin Tamasi, Vernon, B.C., age 15; Brian Irving, Kelvington, age 13; Dorothy Taylor, Parkman, age 12; Bohdan Pylypec, Yellow Creek, age 14; and Peter Wayte, Regina, age 12.

Some of the entries read too much as if they were copied directly from bird books. Contestants should put

down their own observations in their own words. The contestant who was most successful in doing this was Dorothy Taylor. To her goes the prize. Congratulations, Dorothy. To the rest of you, many thanks for entering this contest; we needed your support. Keep trying and better luck next time.

## EXTRACTS FROM BIRD STUDY CONTEST

Robin Tamasi writes, "This year we have a Tree Swallow nesting in a bluebird house which had a wren in it last year. The pair of swallows are still not sure whether to nest here or not but they come and inspect it early every morning."

Dorothy Taylor writes about a Barn Swallow, "This bird does not come back to Saskatchewan until the middle of May because it feeds on insects and insects don't come out of their winter sleeping quarters until later when it is warmer. The swallow destroys many insects that are very annoying to us and if it wasn't for this bird there would be many more insects to fight."

## BOHDAN PYLYPEC AWARDED "HONOR NATURALIST" TITLE

Our records for the last year (since September, 1963) show that Bohdan Pylypec has made the most contributions to this section for the past year and is therefore awarded the title of "Honor Naturalist". From now on, when writing to this section of the **Blue Jay**, Bohdan can put the initials H.N. after his name.

Congratulations, Bohdan. Let's see how many more Junior Naturalists can earn the title of "Honor Naturalist" by next September.

## LETTER WRITING CONTEST

Any boy or girl may enter the letter writing contest. Entries must be first hand observations. All entries must be accompanied by the name, age and address of the sender. Send entries to Blue Jay Contest, c/o Mrs. Joyce Deutscher, Saskatchewan Museum of Natural History, Regina, to arrive not later than October 14. Sketches and photographs may be sent as well. The prize is a year's subscription to the **Blue Jay** plus the honor of seeing your items in print!



## BIRDS OF THE KELVINGTON AREA

by **Brian Irving**, age 13, Kelvington

On the gloomy morning of August 31, 1963, my grandmother, aunt and myself went on a drive up to Greenwater Provincial Park, some thirty four miles from home. On the way a couple of Sparrow Hawks were seen perched on a telephone line. The Vesper Sparrows and Common Crows as usual were seen in large flocks. When we arrived and looked around a little we noticed a flock of about thirty Cedar Waxwings feeding in a grove of aspens; there were also a few Hairy Woodpeckers around.

After lunch a flock of Brewer's Blackbirds and an Eastern Phoebe were located in the bush. On the way home we decided to take a back road to see if we could find anything.

We had to travel several extra miles but we did see three Mourning Doves perched on a lonely telephone line.

On September 2, I heard some sparrows singing in a bluff behind our house. After some time I identified one species as the Savannah Sparrow and a flock of Vespers. There was also a Philadelphia Vireo flitting between the trees.

On September 5, a Warbling Vireo was heard in an aspen bluff. Two large flocks of Brewer's and Red-winged Blackbirds were seen in marshy areas. A pair of Rough-legged Hawks were soaring with outspread wings over a meadow.

While I was riding horseback on September 8, I found a small owl on a road. I thought it might be an eared owl but couldn't be sure. When I got home and looked it up I decided it was a Long-eared Owl. It had apparently been hit by a car.

There were several Yellow-shafted Flickers around and a large flock of McCown's Longspurs were feeding on a summerfallow field. A lonely Robin was perched in a dead aspen and an American Goldfinch flew across a meadow. A half dozen Magnolia Warblers flew into a clump of willows. Even a Western Meadowlark was heard. At dusk a beautiful White-tailed doe and two young stood at the edge of a bluff for a moment.

Then with tails up like flags they dashed into the trees.

At school on the 10th a fairly large flock of Purple Martins went swooping around in their search for insects. At Bob Fraser's home just across the street he has two nestboxes with several sections in each. Always, a lot of birds nest there. These same birds were present the following day; no doubt some of these were from Mr. Fraser's nestboxes.

## WINTER AROUND THE TREGARVA DISTRICT, 1963-64

by **Kenneth Dickson**, Tregarva

The first day of winter comes after a long fall, and you think it was never going to snow.

As for some of our wildlife, they are much pleased about the lack of snow. The deer don't have to plow snow in search of food. As for the rabbit he doesn't like this for he is turning white and can be seen much more easily by Mr. Red Fox.

But at last it snows. The Snow Buntings start coming in big flocks, all singing and flying about on the roads. You walk down into the valley and the chickadees are there by the dozens all very curious to see what is coming and who you are.

One day Doug Gilroy and I went for an afternoon walk. It was about 35 above, 25 mile per hour wind and snowing very hard. We walked down into the valley to see what we could spot.

When we got down in among the trees it was quite nice. We saw a deer which saw us, so it turned, snorted and ran. Then we spotted a bushy porcupine. He came down from his tree and headed for his den which consisted of a pile of brush. He crawled underneath. Along the bank of the creek you could see his tunnels every once in a while. As we went on through the trees we came across a very big flock of Pine Grosbeaks, very pretty indeed, all singing and fluttering about.

(To be continued in next issue)



# The Blue Jay Bookshelf

**COMMON WEEDS OF THE CANADIAN PRAIRIES: AIDS TO IDENTIFICATION BY VEGETATIVE CHARACTERS.** By K. F. Best and A. C. Budd. 1964. Illustrated with line drawings. 70 pages. Queen's Printer, Ottawa. \$1, paper; \$2, cloth.

Whenever man settles a new piece of country hitherto undisturbed by agriculture and transportation, he in one way or another takes with him plants new to the region. Many of these "introduced" plants compete with field crops or infest marketable produce. These introduced plants and an ever increasing number of "native" species are now categorized as "weeds". No attempt was made to define "weed" in this booklet, but it appears that as agriculture becomes more intensive and quality produce more in demand, the list of plants to be categorized as weeds will grow.

Keith Best and the late Archie Budd (both well-known to readers of the **Blue Jay**) have done a notable job in producing this guide. The key is quite simple and will aid in identifying plants while they are still small or immature. Some 180 plants are included and each one has a written description and a simple line drawing. In a few instances the drawing could have been better or show certain details more clearly. Mountain Sneezeweed (page 41) should be redrawn to show the notched petals; the scale-like leaves on the upper

stem of the Skeletonweed (page 47) are not distinctive and it appears that an incorrect drawing of Pineapple Weed (page 48) accompanies the text, which is correct. In general the drawings are large enough to be useful, once one has gone through the key. With practice in the field, using fresh materials against the key, this booklet will increase in value to the user. Difficult specimens can be submitted to the nearest Experimental Farm, or to the Universities. A home collection of pressed specimens, correctly identified, would serve as a ready reference.

**Common Weeds of the Canadian Prairies** will serve agricultural interests well, but for those interested in all varieties of native and introduced plants of the prairies, there is great need for a reprinting or new edition of Archie Budd's **Wild Plants of the Canadian Prairies**.—Dorothy R. and Douglas E. Wade, Regina.

## BOOKS WANTED

We buy books on birds, animals, amphibians, botany, wild flowers, mosses, fungi and related material. Send list for offer, we pay shipping.

**Seven Seas Book Service**

Box 15, Station "J"

**TORONTO 6, ONTARIO**

## Science Education Conference

The Northern Regional and International Science Education Conference is to be held at the Banff School of Fine Arts, Banff, Alberta, from September 17-20, 1964. This will be the first time the National Science Teachers Association has held a conference in a country other than the United States.

Although participants at the conference will mainly be from western Canada, Montana, Idaho, North Dakota and Alaska there will be a strong international emphasis. There will be delegates and speakers from England, Australia, New Zealand, Japan and other countries as well as from the major science education

centres all across Canada and the United States.

General sessions and special small work-discussion groups will make critical appraisals of the new science curriculum projects. Dr. Brock Chisholm will give one of the main addresses. Among the highlights of the conference there will be a field trip and illustrated talk on the "Flora and Fauna of Banff National Park" by Prof. Cyril G. Hampson.

Information and pre-registration forms may be obtained by writing to Prof. W. F. Reese, Faculty of Education, University of Alberta, Edmonton.



## NOTES and LETTERS

### SUMMER MEETING

**Dr. C. Stuart Houston's** letter of June 13, 1964, is full of praise for Doug Redley, Dave Santy, the scouts and all the good people of Beechy who made our Summer Meeting such a success. **Mrs. McLaughlin's** interesting report of the weekend will give those who could not attend some idea of what they missed and what those who went owe to the community of Beechy. Local Beechy people can be sure that we will not forget their hospitality during our memorable summer meeting of 1964. **Edgar Sullivan**, Dundurn, wrote us with a "thank you" for everyone who helped make the Beechy weekend such an enjoyable experience. **Ernie Symons**, Rocanville, sent us a \$15 donation because he was unable to come to our Summer Meeting.

### A BOUQUET TO THE MUSEUM

We visited the Saskatchewan Museum of Natural History for a short time last summer. We were delighted with it and hope it will continue to be of interest to more people every year. Everything looks so real and children are always thrilled with the birds and other animals.—**Mrs. R. Parfitt**, Moosomin.

### INCOMPLETE BLUE JAY

**Mr. A. Heidrick**, Winnipeg, returned his June, 1964, **Blue Jay** because it was incomplete. The pages 59-74 inclusive were missing and in their place were an extra set of pages 51-58 and 75-82. If any other member received a defective copy he should return it to Box 1121. As long as we have any copies we will send them out in exchange for incomplete copies.

### PRONGHORN

**Wolfram Niessen** writes from his new home in Duluth, Minnesota, to say that the Pronghorn which was seen at Pilot Butte, Saskatchewan (**Blue Jay**, 22: 84) was seen by him and his wife in the last week of August, 1959, immediately south of the town, about 5:30 p.m. It is good to get the details on this observation.

### WILLOW PTARMIGAN

I noted with special interest Robert R. Taylor's article on the southerly record of the Willow Ptarmigan (**Blue Jay**, 22: 57). This species was recorded on several Manitoba Christmas Counts and in March two were reported in our northernmost Minnesota county. Perhaps this year (or rather, this winter) marked a small southward movement for that species, since we have not had a Minnesota record for about 30 years.—**Ron Huber**, Minneapolis, Minn.

Editor's Note: According to information received from a field party (Ross Lein and Richard Sanderson, working under the direction of R. W. Nero) the Willow Ptarmigan was not recorded at all during the past winter at the settlement of Wollaston on Wollaston Lake in extreme north-eastern Saskatchewan.

### PESTICIDES

I am very interested in wild life but it is getting scarcer every year because of excessive use of chemicals. Last year there were no robins for the first time in fifty years. Likewise there were no bluebirds and I saw many dead bees and young birds dead in the nest. What a shame!—**Mrs. Appleton**, Tangleflags.

### SOME NESTING NOTES

Orioles may be beautiful birds but they have evil natures, at times, anyway! A Brewer's Blackbird had worked hard for days building a nest beside our kitchen window. One morning the female oriole was tasting something inside this nest and when I went to look, she had partly eaten the blackbird's first egg. The nest of course was abandoned and the oriole even had the nerve to come and pull horse hair out of it for her own nest!

Another odd thing in my note book is the fact that on May 17 a Blue-winged Teal's nest was found in the grass about 15 feet from our house! She eventually laid 11 eggs, but lost three of them, I imagine to a rat. However, on June 15, she is still sitting and stays on her nest when we



part the grass to look at her. She hisses but doesn't move.

We have two pairs of Brown Thrashers nesting in our yard and did have young robins hatched till the cat got them. Several cuckoos are back—we had three nests last year in our farm yard. The goldfinches are very busy in the dandelion seed heads. One Brewer's Blackbird lost a large family to some unknown cause. We found six dead young in a nest in the evergreens and there was one egg unhatched. We had some rain, but that should not have killed them, as they already had pin feathers.

The bluebirds apparently avoided us this year after losing a nest last year to Starlings. Just to be contrary, the Starlings stayed away too, except for one pair which we caught in the old combine. Tree Swallows seem scarce, though one has nested in one of our new bird boxes.—**Mrs. Keith Paton, Oxbow.**

### RUFOUS HUMMINGBIRD

In the Spring of 1962 my husband was cutting off some low-hanging cedar boughs over our front driveway when he spied a tiny nest—he let go the branch suddenly as he realized a little family of humming birds occupied it! We greatly enjoyed watching that little family thrive, try their wings, and finally spend the rest of the summer about our garden, taking nectar from our scarlet runners (mainly) and nasturtiums. They became very tame, coming right up to our hands when we hosed the garden.

Early in April, 1963, we noticed a female again about our garden; and

on April 7 were amazed to see she was beginning to re-build last year's nest—of which only a foundation remained. She built it up quite high, and laid two eggs. We never got a close look at her mate, but often heard the aerial mating display. The female, however, answered the description of the Rufous in every respect but one—and that is, she had a small black spot on the lower part of her throat. We observed her very closely on her nest with field glasses, and this seemed to be a permanent distinctive mark. She hatched her two babies, and they remained about our garden, and we observed her feeding them at very close range on different occasions. On one of these when she was facing full into the morning sun, and about 10 feet or less from me, the tiny spot on her throat appeared to have a scarlet center, about the size of a match-head. She was a little worried about my presence so close to her baby, and it seemed as though this tiny spot rose in the manner of a crest on the head of a male mating bird.

On June 8, 1963, we discovered a new nest, in another cedar across the driveway from the original nest. We feel sure it was the same little female, as the distinctive marking on the throat was there; also, instead of feeding the original two babies (which remained about our garden all summer) she would chase them and scold at them.

She raised two more babies, and they remained about some time after our last seeing their mother.—**Mrs. Joan Wootton, Vancouver.**

## Summer Meeting at Beechy, June 4-5-6, 1964

by **Rose McLaughlin, Indian Head**

In an enterprising departure from parks and resort facilities, this year's B.N.H.S. meeting took the form of an under-canvas expedition into the rugged ranch country that lies south of Beechy, encircled by the southernmost curve of the South Saskatchewan River. Lying at the very heart of the Palliser triangle, and inaccessible on three sides, except by ferry, this little nook of Saskatchewan contains many features of interest to the naturalist.

Here may be found the dancing grounds of our fast-diminishing sharp-tailed grouse; here golden eagles nest in the eroded niches of high cut-banks; and here the rare sage vole and grasshopper mouse have their haunts. The semi-arid vegetation includes sagebrush, cactus, skunkbush, winterfat, and the delicate rock rose.

The area is also a happy hunting ground for rock hounds and amateur archaeologists. Its eroded hills abound



in fossils; and the bones of the Plesiosaur and Mosasaur, monsters of an ancient tropical sea, have been found here at a point called the River Hills, where the banks of the South Saskatchewan are higher above water level—almost a thousand feet in places—than at any other point on the river's entire course.

Because this fascinating, out-of-the-way corner of Saskatchewan will soon be covered by the waters of the South Saskatchewan River Dam reservoir, it was proposed as a good locale for our summer meeting by two Beechy members, Doug Redley and Dave Santy. The problem was how to accommodate upwards of a hundred and fifty people of all ages, without billeting them in a scattering of small towns and destroying the unity of the meeting.

Doug Redley came up with a colorful answer by laying out a campsite in the river breaks ten miles south of Beechy, on land provided by rancher member Bill Peters. Here Doug built two king-size limestone barbecues, set up the framework for half a dozen huge picnic tables, and arranged three camping areas—Poplar Grove for family groups, Wild Rose Camp for unescorted females, and Cactus Gulch for the men, with a rustic bridge to negotiate the gulch. The outdoor plumbing—labelled “Bucks” and “Does”—featured small grated fireplaces for heating wash water. A large house tent equipped with a loud speaker served as camp headquarters and concession booth. Earthen steps with rustic railings gave easy access to this coulee campsite.

One marvels at the energy and ingenuity behind these preparations. The triumphs and mishaps will never all be told—the two-way communication system with Beechy which conked out at the last minute; the route signs which were inadvertently v'd in the wrong direction, like this: SNHS, and then flipped around to read: SHNS (“Societe Historicale Naturelle Saskatchewan—this is carrying bilingualism too far,” remarked one Moose Jaw member.) An innovation which future program conveners might copy was Doug Redley's brochure on the territory we visited.

The town of Beechy gave wonderful backing to the enterprise too.

Municipal equipment scraped a trail into the camp; local lumber yards supplied planks for the tables and benches; Chamber of Commerce men came out both mornings to serve bacon, eggs and coffee off the barbecues; Homemakers and other women's groups packed noon lunches for the Saturday excursion, and served supper with assembly-line efficiency from a booth no bigger than a butler's pantry. The Boy Scouts acted as tent men, bell hops, sign posts, campfire builders, and came to the rescue during a windy spell Friday night, holding the tents up—or down!—according as the wind blew.

Everyone co-operated but the weatherman!

In an umbrella tent office on the coulee rim, secretary Margaret Belcher checked in 131 guests, including several family groups—the Gentles from Regina, the Peppers from Saskatoon, the Jordheims from White Bear. Mr. and Mrs. Monckton of Victoria who were at the Cypress Hills a year ago, joined us again on their way home from a trip to Point Pelee. Also from Victoria came Miss Gould, a retired teacher who was at Beechy during the 30's, and hadn't been back since until this meeting. Other notables on the register were Mr. and Mrs. Dick Bird of Regina and George Leith, the new M.L.A. from Elrose. Frank Roy should be mentioned here too, partly because a check of the records would probably give him the prize for regular attendance, but also because he had with him his auspicious new “Birds of the Elbow”, stapled together a day or two previously with the help of friends.

At 9:30 Saturday morning Bill Peters, in a school bus loaded with Boy Scouts, headed a thirty-car motorcade on a thirty-mile drive to the River Hills, where our rancher host, Pete Perrin, took over, giving us an orientation tour of the River Hills and the nearby phenomenal Sunker Hill. A cave-in many acres in extent occurred here some fifteen years ago for no known reason, though some theorists believe that underlying quicksands, shifting into the river caused the collapse. According to Mr. Perrin, a rancher drove over the hill one day, and two days later he found his wheel tracks on the rough floor



of a craterlike depression some seventy-five feet below the level of the surrounding area.

Following this, the party fanned out in interest groups. Dr. Houston and Frank Roy led bird hikes; Dr. Ledingham and John Hudson took on the botanists; while Doug Redley and Watson Crossley took the stouter souls on a long hike to where excavation is in progress on a skeleton—of what, Doug isn't sure, but we have it on the authority of one small hiker that it was "all bones".

On the way home there was a hospitable pause at Pete Perrin's ranch for coffee and doughnuts, delicious on that chilly day. Besides the calves and colts and kittens and pups, Mr. Perrin had a number of curios on display.

Back at camp, over a hearty supper, everyone swapped yarns on the day's adventure. Dr. Houston's group had found an eagle's nest and banded the young eaglets. John Hudson's group found an unrecorded species of skeleton weed. Artists like Mrs. Rhodes of Moose Jaw and Joyce Deutscher found much to delight them in the color and line of the landscape. The women from Indian Head found a hidden dell in the fold of a coulee, lush with moss and ferns, twining honeysuckle, violets, and fairy bells. The little hiker from Beechy almost lost the toe of his shoe in an encounter with a cactus, while not on the trail of the dinosaur bones. Young Michael Gollop, on the missing list twice, made it home safely, and so did the elderly lady who had feared she might get picked up as a fossil! The day ended with a campfire and more coffee, and everyone bundled in sweaters and blankets against the blasts of June.

Sunday morning brought its usual quota of unscheduled expeditions, the most spectacular being a flight along the river in search of eagles, taken by Stan Peters of Beechy and Bob Taylor, Saskatchewan Government photographer. Hamburgers around the barbecues at noon brought to a close a most interesting and colorful field meet.

## LIST OF PERSONS REGISTERED

**SASKATCHEWAN**—Beechy: Dennis Dailpenner, M. Flynn, Alfred

Jones, Pete Link, Mr. and Mrs. P. Perrin, Mr. and Mrs. W. Peters, D. Redley, D. Santy; **Cabri**: Dianne Fahselt; **Carnagh**: Kate Shuard; **Churchbridge**: H. Hlady; **Dinsmore**: J. Alix, H. Hedger; **Dundurn**: Mrs. Edith Stait, E. Sullivan; **Gerald**: Mrs. F. Hermansky, L. Martinovsky, T. Martinovsky; **Glamis**: H. Harbicht, George Leith, Mr. and Mrs. J. Smith, Thane Smith; **Indian Head**: Mrs. F. Fisher, Mr. and Mrs. R. McLaughlin; **Kelvington**: Brian Irving; **Maple Creek**: Mr. and Mrs. G. MacMillan; **Minton**: Mr. and Mrs. W. Dinwcodie; **Montmarte**: Gerald Wilkie; **Moose Jaw**: Mrs. A. Crofford, Sylvie Curtis, Mrs. A. Davies, Mrs. Vesta Humphreys, Mrs. Dorothy Rhodes; **Regina**: Nellie Ballantyne, Margaret Belcher, Mr. and Mrs. D. Bird, Mrs. and Mrs. F. Brazier, C. Brown, Mr. and Mrs. A. Deutscher, A. Foster, Stephen Foster, Mr. and Mrs. T. Gentles and family, Pearl Guest, Sylvia Harrison, Gwen Jones, Ferne Lawrence, Dr. G. Ledingham, B. MacPherson, Grant MacPherson, Loraine MacPherson, Dr. R. Nero, Birch and Woodie Nero, Connie Pratt, Amalia Pucat, Anne Scott, Carla Stein, R. Taylor, Elisabeth Wagner, Janice Zacharias; **Saskatoon**: J. Black, Dr. R. Bremner, Murray Bremner, Jeanette Broderick, Marjorie Clarke, Pern Cordery, Helen Forester, Marie Gillespie, Michael Gollop, Eleanor Hanna, Mr. and Mrs. V. Harper, Mr. and Mrs. J. Hogg, Dr. and Mrs. S. Houston, Stan Houston, John Hudson, Mr. and Mrs. A. McComb, Mr. and Mrs. L. MacMurchy, Mr. and Mrs. F. McNabb, Margaret Mahon, Jean Meston, Mary O'Hara, Dr. and Mrs. J. Pepper, Phyllis, Ron and Gordon Pepper, F. Roy, J. Slimmon, Doug Slimmon, Mr. and Mrs. J. Turnquist, Lucy Young, Doreen Wright; **Shaunavon**: D. Chandler, Ruth Chandler; **Skull Creek**: Mr. and Mrs. S. Mann; **Surbiton**: Mr. and Mrs. J. B. Smith; **Swift Current**: E. Uglem; **Tullis**: Mrs. Evelyn Boon, C. Boon; **White Bear**: Mr. and Mrs. S. Jordheim, Brian, Lynette and Garry Jordheim; **Wolseley**: D. Hayward; **Woodrow**: C. Shulver.

**BRITISH COLUMBIA**—From Victoria: Muriel Gould and Mr. and Mrs. P. Monckton.

**MANITOBA**—From Grand View: W. Crossley.



## S. N. H. S. Crest Contest Results

The designs submitted to the SNHS Crest Contest were judged by a panel of judges appointed by the Executive and consisting of Mr. Art MacKay, Professor of Art, University of Saskatchewan, Regina Campus; Mr. Art Walters, staff artist, Saskatchewan Museum of Natural History; and Mr. Frank Roy, representing the Society. The Committee met in Regina at the Art Gallery, May 9. They considered 40 submissions sent in by 17 members of the Society, including two each from the provinces of Alberta and Manitoba.

The design selected for first prize was one submitted by Mr. H. W. Wickenden of Saskatoon. The Committee felt that his was the outstanding design, combining to the highest degree the qualities desirable in a Society emblem. They considered the design at once simple and meaningful. The black form at the top,

representing a coniferous tree (symbolic of our forest resources) and the orange form at the bottom, a tiger lily (the provincial floral emblem) accompany the symbol of the protective hand.

The second choice of the Committee was Robert Taylor's fine Pelican crest, and a close third the Canada Goose design submitted by Mrs. T. Capusten, Prince Albert. The Committee also singled out for special praise the unique Sharp-tailed Grouse design submitted by Robert Taylor, although it was felt that the lines were too complicated for successful reproduction in a crest.

Unfortunately the executive did not feel the prize winning crest was quite suitable for our society. This matter will be discussed further at the Annual Meeting in October (see page 132).



First Prize: H. W. Wickenden



Second Choice: R. R. Taylor



Third Choice: Mrs. T. Capusten



Special Mention: R. R. Taylor



## Membership Drive



Painting by F. W. Lahrman

The above picture is a photo of a beautiful oil painting, 20" x 28", done for the Society by our gifted museum artist Fred W. Lahrman. The picture shows a Prairie Dog colony in southwestern Saskatchewan, the only place in Canada where such a sight may be seen. Other animals shown in the painting are the Pronghorn and the Sage Grouse.

Every member, paid up for 1965 before January 15, 1965, may have a chance to win this beautiful picture. The original oil painting will be the prize for a big membership drive. The object of the contest is simply to increase our membership and the prize is really worth working for. It has been suggested that there also be a substantial cash prize for the person bringing in the most new memberships. Exact details of the contest have not been worked out but they will be available at the annual meeting and in the December **Blue Jay**. The contest will end on January 15, 1965, and the sooner you begin the better your chances will be. Start sending new memberships in now.

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### 1964 CHRISTMAS CARD AND HASTI-NOTE

This year the merry drawing of two Boreal Chickadees by the artist Ralph Carson has been chosen to illustrate our Christmas card. These gay chickadees, in lovely Duotone, make a truly beautiful card which is available both with a Christmas Greeting and as a hasti-note. Please order early as stocks are limited—\$1.00 a dozen (card or hasti-note) from the **Blue Jay Bookshop**, Box 121, Regina; \$1.05 a dozen, including 5% tax, for Saskatchewan residents.

If you like a selection, we still have some stocks of the delightful Yellow-headed Blackbird by Fred Lahrman and the charming Downy Woodpecker by Ruth Tempel and the beautiful photos of the Bohemian Waxwing by Cy Hampson. These are still available at the same price either as Christmas Card or as Hasti-note.

Don't forget our five special publications on mammals or birds. Every member should have them all. They also make good gifts for Christmas, as does a membership in our Society.



# S. N. H. S. Annual Meeting

## October 16-17, 1964

**Place:** Saskatchewan Museum of Natural History, Regina.

**Registration:** Adults, \$1.00; children, no charge; dinner tickets extra. The registration desk will be open in the rotunda of the Museum from 7:00 o'clock (CST) on Friday evening, and again from 9:00 a.m. Saturday.

### Programme:

#### Friday evening, October 16

**Informal Coffee Party:** Coffee will be served in the east lounge at 9:00 p.m. All members of both the Saskatchewan and Regina Natural History Societies are cordially invited to this get-together. Hosts—Regina Natural History Society.

#### Saturday, October 17

**Early morning bird trip:** Meet at the Museum at 7:30 a.m. if interested in a trip to the Waterfowl Park. Coffee will be available at the Museum at 9.

**Registration and Morning Coffee:** 9:00 a.m. to 9:30 a.m. Museum Rotunda.

**Business Session:** 9:30 to 12:00 noon.

**Lunch Hour:** 12:00 to 1:30.

**Programme Session:** 1:30 to 5:00 p.m., with coffee break at 3:15.

**Dinner:** to be served in the lounge at the Museum at 6:30 p.m. Please get tickets as soon as possible at the Registration desk.

**Evening Address:** Public meeting in the Museum Auditorium at 8:00 p.m. to hear the distinguished speaker, R. York Edwards, from the British Columbia Parks Department, speak on "Preserving Nature in Parks" Urge your friends to come to this important lecture.

### MEMBERS' CONTRIBUTIONS

It is hoped that the afternoon programme will consist mostly, or entirely, of contributions from the members. If you have kodachromes or if you have something to show or something you want to talk about please write in, before October 1, to the programme convener, Mr. Harvey Beck, Saskatchewan Museum of Natural History, Regina. Each member may be allowed about ten minutes but you must write in with your suggestion before October 1 so that your name may be put on the programme and so that a worthwhile programme may be arranged for the afternoon.

### NOMINATIONS AND RESOLUTIONS

Please send nominations and resolutions to the Recording Secretary, Jim Slimmon, 2526 Hanover Avenue, Saskatoon, as soon as possible. Suggestions or inquiries about the annual meeting may be sent to Harvey Beck or Jim Slimmon.

## INTRODUCING OUR GUEST SPEAKER



R. York Edwards

### R. York Edwards

was born in Toronto in 1924, and he remembers being a bird watcher by 1937. He graduated with B.Sc.F. in forestry from the University of Toronto in 1948, and received his M.A. in zoology from the University of British Columbia in 1950. He now lives in Victoria where he is biologist to the Provincial Parks Branch. After graduation he spent about ten years on big game research in parks, and is now engaged in all aspects of park naturalist programs and park nature centres. His hobbies are bird watching, collecting books, bird watching, history, being a general naturalist, repairing his old house, and bird watching.



# THE SASKATCHEWAN NATURAL HISTORY SOCIETY

## OFFICERS (October, 1963, to October, 1964)

<b>Honorary President</b> .....	President J. W. T. Spinks, University of Saskatchewan, Saskatoon
<b>Past President</b> .....	Ronald M. Bremner, 404 Medical Arts, Saskatoon
<b>President</b> .....	Steve A. Mann, Skull Creek
<b>First Vice-President</b> .....	Doug Wade, 1351 Jubilee Ave., Regina
<b>Second Vice-President</b> .....	A. O. Aschim, Prince Albert
<b>Treasurer</b> .....	Frank Brazier, 2657 Cameron St., Regina
<b>Circulation Manager</b> .....	Frank Roy, 120 Maple Street, Saskatoon
<b>Corresponding Secretary</b> ....	Margaret Belcher, University of Sask., Regina Campus

## DIRECTORS

**Three-year Directors:** Bernard Haysom, Regina; George MacMillan, Maple Creek; Robert Nero, Regina; James Slimmon, Saskatoon; Mrs. F. B. Taylor, Moose Jaw.

**Two-year Directors:** Dave Santy, Beechy; Robert Mills, Saskatoon; John Lane, Brandon; Robert Folker, Saskatoon; David Chandler, Masefield.

**One-year Directors:** Lawrence Beckie, Bladworth; Manley Callin, Fort San; Doug Gilroy, R.R. 2, Regina; John Hudson, Saskatoon; Ross Lein, Estevan.

## PRESIDENTS OF LOCAL SOCIETIES

John Nelson, Moose Jaw; A. O. Aschim, Prince Albert; Herb Moulding, Regina; Stuart Houston, Saskatoon.

## CHAIRMEN OF COMMITTEES

**Conservation:** R. D. Symons, Box 1121, Regina; **Crest Committee:** Ruth Chandler, Shaunavon; **Greeting Cards:** Mrs. Dorothy Wade, 1351 Jubilee Avenue, Regina; **Membership:** Frank Brazier, 2657 Cameron Street, Regina; **Newsletter:** Doug Wade, 1351 Jubilee Avenue, Regina; **Prairie Nest Records Scheme:** Robert R. Taylor, Box 1121, Regina; **Publications:** Stuart Houston, 2401 Hanover Avenue, Saskatoon; **Research Awards:** Elmer Fox, 3455 Rae Street, Regina; **Summer Meeting:** D. Redley, Swift Current; **Wilderness Area:** J. Wedgwood, 610 Leslie Avenue, Saskatoon.

## BLUE JAY MAGAZINE

**Editor:** George F. Ledingham; **Assistant Editors:** Margaret Belcher and Robert W. Nero; **Junior Naturalists' Editor:** Joyce Deutscher.

## MEMBERSHIP

Membership in the Saskatchewan Natural History Society is open to all persons interested in any aspect of nature. At the Annual Meeting of the Society, October 19, 1963, the following classes of membership were approved—**Regular**, \$2.00; **Supporting**, \$3.00; **Sustaining** \$5.00; **Junior** (including schools), \$1.00. The **Blue Jay** is sent without charge to all members not in arrears for dues.

The members at the Annual Meeting voted against raising the basic membership (including subscription to the **Blue Jay**) above \$2.00, but urged all those who can give additional assistance to the Society to become **supporting** or **sustaining** members.

Send all renewals and new memberships to Frank Brazier, **Blue Jay, Box 1121, Regina, Sask.**

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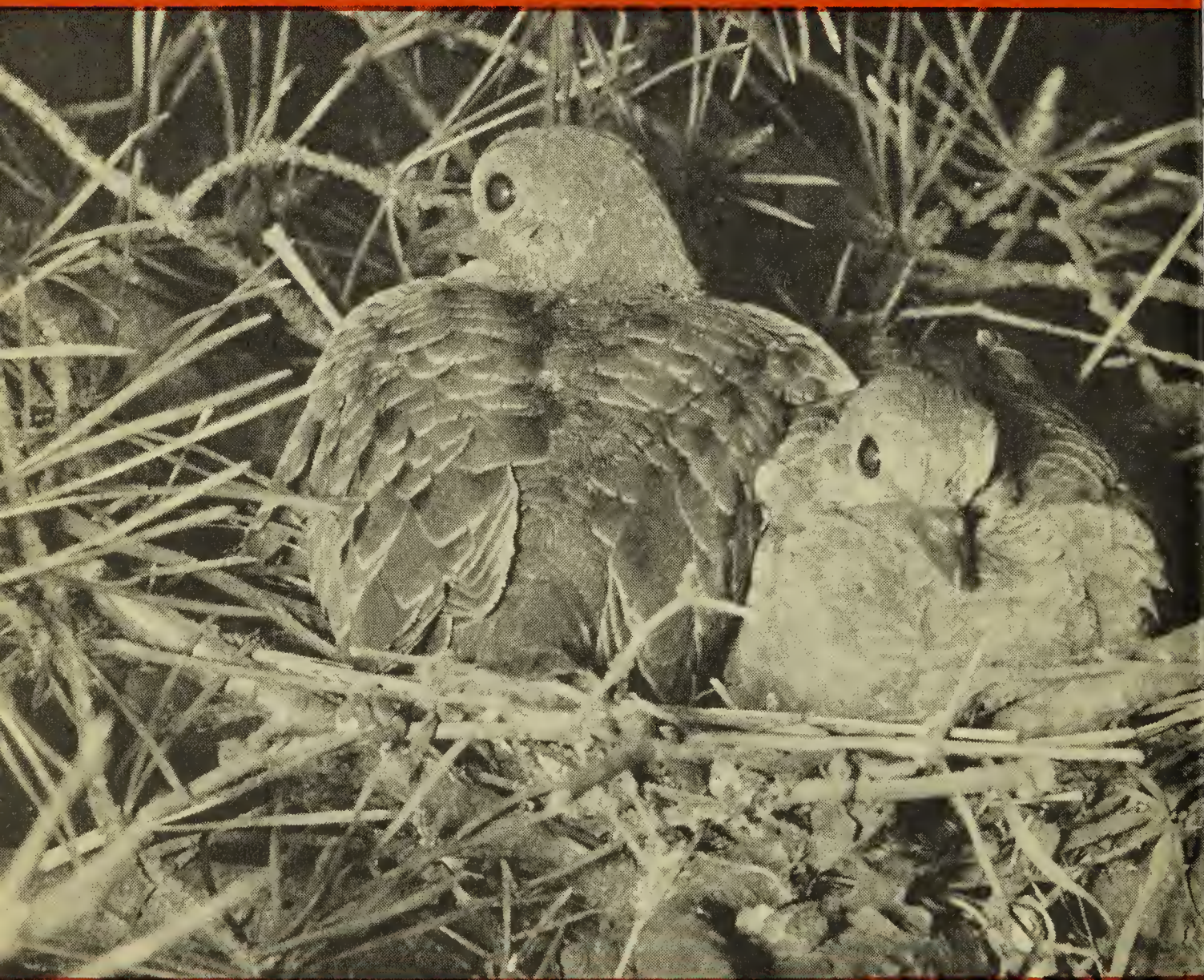
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Young Mourning Doves in Nest

Photo by Robert R. Taylor

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Frank Brazier, Box 1211, Regina, Sask.  
SEND MATERIAL FOR PUBLICATION IN THE DECEMBER ISSUE  
BY OCTOBER 15, 1964, TO  
G. F. Ledingham, 2335 Athol Street, Regina







